



**U.S. Army
Environmental
Center**

Final Transformer Study Report (AREE 66)

Base Realignment and Closure Environmental Evaluation (BRAC EE) Fort Devens, Massachusetts

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

Submitted to

**U.S. Army Environmental
Center (USAEC)
Aberdeen Proving Ground, Maryland**

**Revision 1
September 1995**

**Arthur D. Little, Inc.
Acorn Park
Cambridge, Massachusetts
02140-2390**

ADL Reference 67065-64

**DAAA15-91-D-0016
Delivery Order 0005**

**Final Transformer Study
Report (AREE 66)**

Arthur D Little

**Base Realignment
and Closure
Environmental
Evaluation (BRAC EE)
Fort Devens,
Massachusetts**



Program Manager, Robert Lambe

9-21-95
Date



Task Manager, Richard Waterman

9-21-95
Date

Submitted to

**U.S. Army Environmental
Center (USAEC)
Aberdeen Proving Ground,
Maryland**

**Revision 1
September 1995**

**Arthur D. Little, Inc.
Acorn Park
Cambridge, Massachusetts
02140-2390**

ADL Reference 67065-64

**DAAA15-91-D-0016
Delivery Order 0005**



This document is printed on
recycled paper and is recyclable.

Table of Contents

List of Acronyms and Abbreviations	iii
Executive Summary	iv
1.0 Introduction and Background	1
1.1 Study Approach	1
1.2 Report Organization and Format	2
2.0 Results of Document Reviews and Interviews	5
2.1 Previous Studies and Historical Transformer Management	5
2.2 Present Transformer Management	5
2.3 Identification of Polychlorinated Biphenyl Oil Leaks and Spills	6
2.3.1 Transformers Reported Leaking - Not Sampled	6
2.3.2 Transformer Sites Sampled	7
2.4 Soil Sampling Protocol and Analytical Program	9
2.5 Analytical Results	10
3.0 Conclusions and Recommendations	20
4.0 Selected References	22

List of Appendices

Appendix A: Fort Devens Interim Standard Operating Procedure Management of Polychlorinated Biphenyls
Appendix B: Environmental Quality Management of Polychlorinated Biphenyls
Appendix C: Transformer Study Protocol
Appendix D: Completed Protocol, AREE 66
Appendix E: Soil Sample Logs, AREE 66G

Table of Contents

List of Figures

Figure 1-1: Transformer Sample Locations - AREE 66	3
Figure 2-1: AREE 66A - Soil Sample Locations and Site Identification Codes . .	12
Figure 2-2: AREE 66B - Soil Sample Locations and Site Identification Codes . .	13
Figure 2-3: AREE 66C - Soil Sample Locations and Site Identification Codes . .	14
Figure 2-4: AREE 66D - Soil Sample Locations and Site Identification Codes . .	15
Figure 2-5: AREE 66E - Soil Sample Locations and Site Identification Codes . .	16
Figure 2-6: AREE 66F - Soil Sample Locations and Site Identification Codes . .	17
Figure 2-7: AREE 66G - Soil Sample Locations and Site Identification Codes . .	18

List of Tables

Table 2-1: Transformer Study Analytical Results	19
---	----

List of Acronyms and Abbreviations

ADL	Arthur D. Little, Inc.
AREE	Area Requiring Environmental Evaluation
BRAC EE	Base Realignment and Closure Environmental Evaluation
CMR	Code of Massachusetts Regulations
DPW	Directorate of Public Works
DQO	Data Quality Objective
EMO	Environmental Management Office
Enhanced PA	Enhanced Preliminary Assessment
GW	Ground Water
MCP	Massachusetts Contingency Plan
MWAA	Maintenance and Waste Accumulation Area
ND	Non-Detection
NFA	No Further Action
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyl
PID	Photoionization Detector
ppm	Parts Per Million
SOP	Standard Operating Procedure
TSCA	Toxic Substances Control Act
µg/g	Micrograms per Gram
µg/L	Micrograms per Liter
USAEC	United States Army Environmental Center
USATHAMA	United States Army Toxic and Hazardous Materials Agency
UST	Underground Storage Tank

Executive Summary

A study to identify locations where transformers containing polychlorinated biphenyl (PCB) oil leaked onto soil on the Main and North Posts of Fort Devens was conducted as part of the Base Realignment and Closure Environmental Evaluation. This study was designated as Area Requiring Environmental Evaluation (AREE) 66. The study included evaluating the current PCB Transformer Management Program administered by the Fort Devens Environmental Management Office (EMO), the Fort Devens Spill Contingency Plan, and the ongoing transformer inspection program. Personnel in both the Fort Devens EMO and the Fort Devens Directorate of Public Works were also interviewed. Transformers included in this study are transformers that were removed from service due to previous leaks. A total of nine locations were identified as having transformers removed due to leaks, and at six of the nine locations PCB oil had come into contact with surrounding soil. Soil samples were collected from each location and analyzed for PCB contamination. Based on the results of the laboratory analysis, further actions were recommended at four of the six locations. AREE 66A (Building 3752), AREE 66B (Building 1634), AREE 66C (Building 3575), and AREE 66F (Building 2025) have all been recommended for removal actions.

In addition, soil sampling was performed at AREE 66G, the Verbeck Substation. Soil staining was identified in the substation and was sampled for PCB contamination. Of the 25 soil samples that contained PCBs, five contained PCBs exceeding Massachusetts Contingency Plan Standards. The contamination was detected around electrical equipment on the west side of the substation. A limited removal action is recommended for this location.

1.0 Introduction and Background

Delivery Order No. 0005 of the Fort Devens Base Realignment and Closure Environmental Evaluation (BRAC EE) was awarded to Arthur D. Little, Inc., by the U.S. Army Environmental Center (USAEC), formerly known as the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA), under Contract No. DAAA15-91-D-0016.

Five sitewide Areas Requiring Environmental Evaluation (AREEs) were included in this BRAC EE:

- Maintenance and Waste Accumulation Areas (MWAAs) - AREE 61
- Previously Removed Underground Storage Tanks (USTs) - AREE 63
- Transformers - AREE 66
- Past Spill Sites - AREE 69
- Storm Sewer System Survey - AREE 70

These AREEs were outlined in the *Enhanced Preliminary Assessment, Fort Devens, Massachusetts (USATHAMA)* (Enhanced PA). This report addresses transformers that contained polychlorinated biphenyl (PCB) oil and were removed from service due to leaks. More than 900 transformers throughout the base were identified during an inventory conducted in 1982. Of these, approximately 100 were labeled as containing PCB oil. No records were available for the years preceding the 1982 basewide study. Management of existing transformers is ongoing and includes conducting transformer inspections and sampling transformer oil. The AREE 66 study reviewed records available at Fort Devens to identify transformers that were removed or replaced due to transformer damage. Six transformer oil spill locations were identified and soil samples were collected and analyzed for PCB contamination. Figure 1-1 identifies the spill locations included in the soil sampling program. Based on analytical results, spill locations were either classified as requiring no further action (NFA) or further sampling was recommended to define the extent of the spill.

1.1 Study Approach

Document and file reviews, personnel interviews, and site inspections were conducted to complete the AREE 66 study. Initial transformer data was gathered from the Enhanced PA, Fort Devens Environmental Management Office (EMO), and Fort Devens Directorate of Public Works (DPW) documents. The document review was conducted over a six-week period by Arthur D. Little's consultants. Fort Devens personnel familiar with transformer management were also interviewed. Using an AREE 66 study protocol, all information available for each reported spill or leak of PCB oil was cross-referenced with other studies included in the BRAC EE. Each AREE 66 location was inspected for evidence of the PCB spill, such as soil staining or stressed vegetation. Locations where it was known that PCB oil came into contact with surrounding soil were sampled. Recommendations for subsequent actions, if necessary, at each of the sample locations were developed based on the results of the

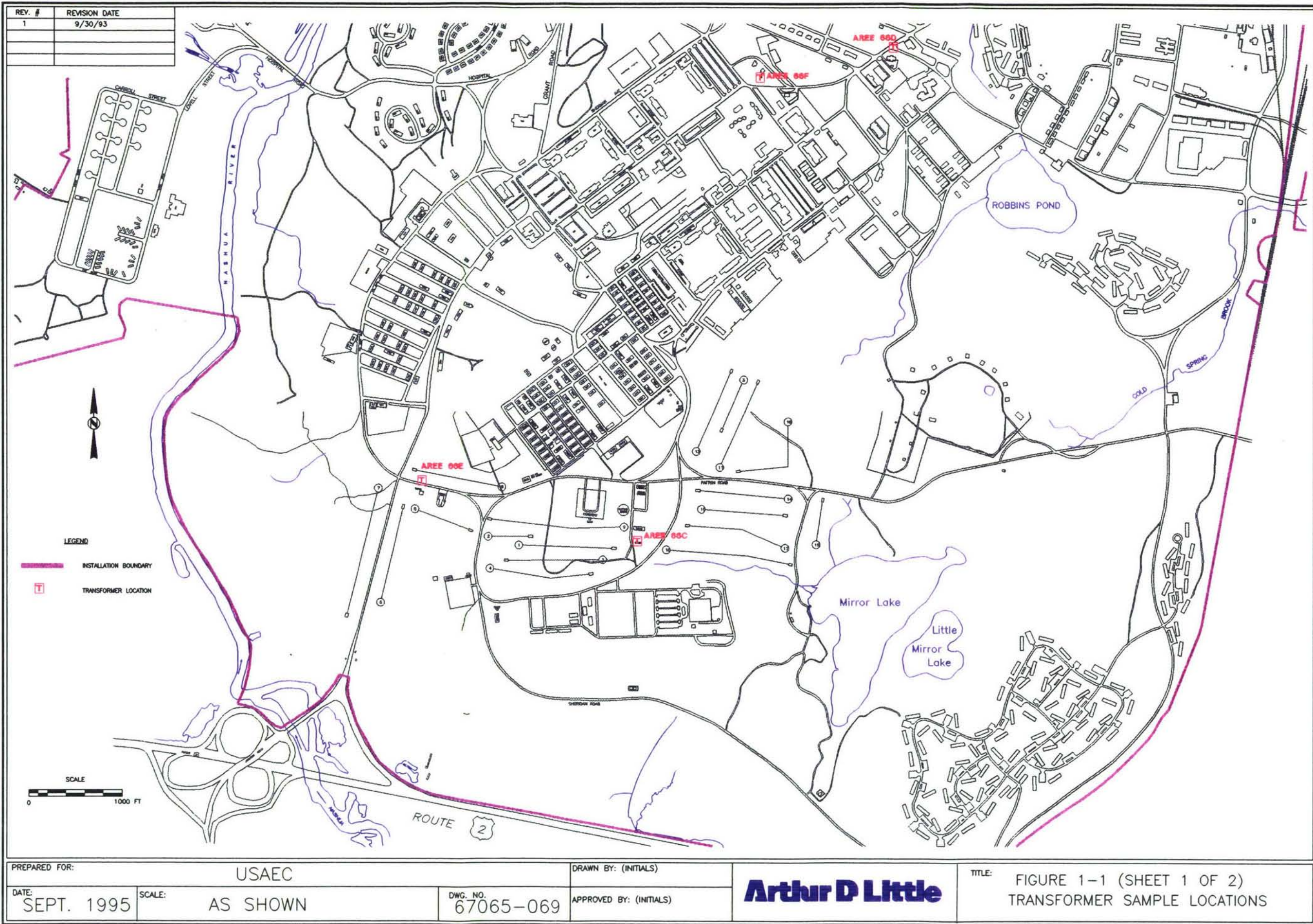
1.0 Introduction and Background

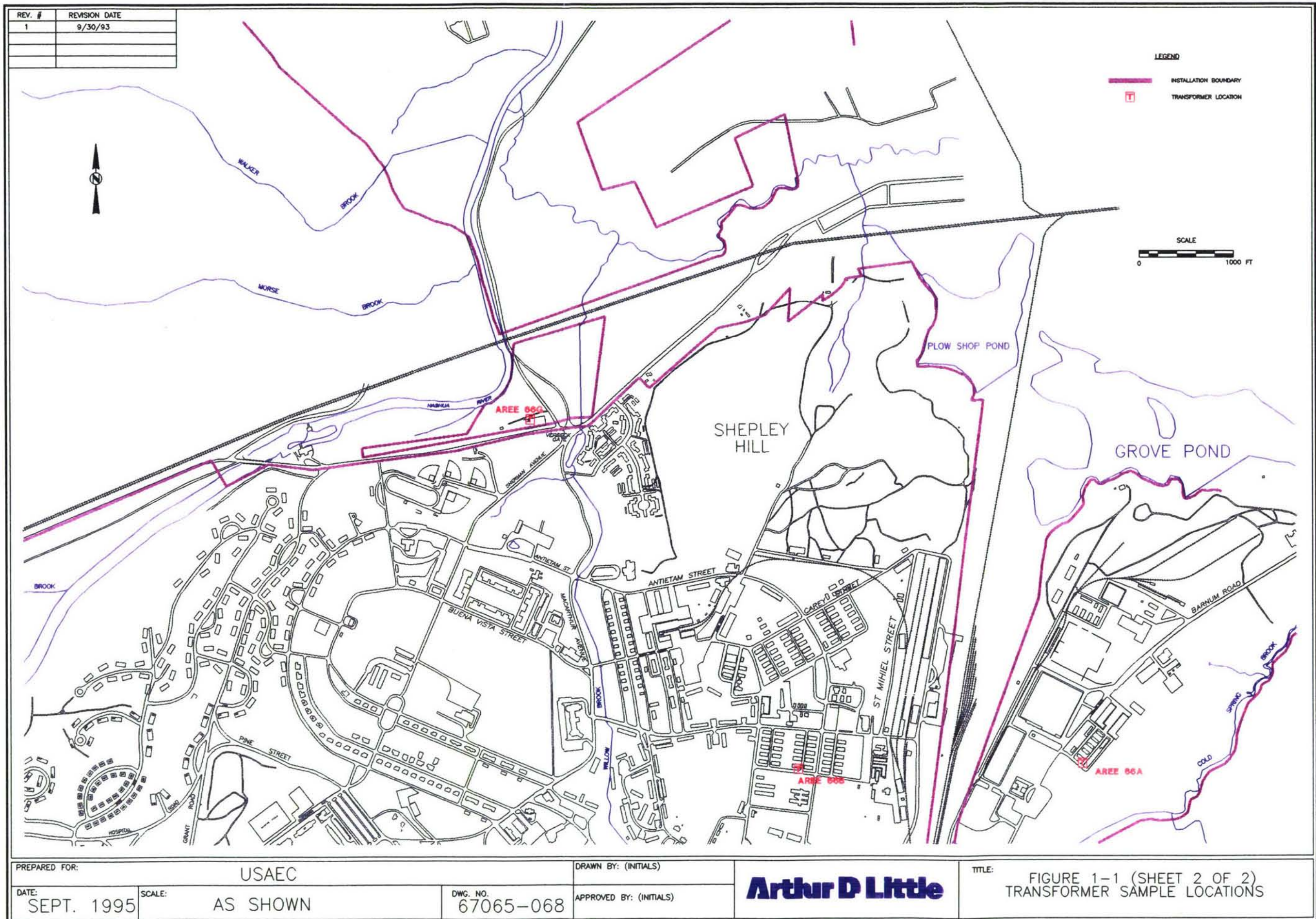
soil sample chemical analysis and the thoroughness of available documentation regarding soil remediation.

1.2 Report Organization and Format

The AREE 66 report is divided into five sections. Section 1.0 provides an introduction, project background, approach, and report organization. Section 2.0 describes the results of document reviews and interviews regarding the management of PCB transformers on the base. This section describes historical transformer management, current transformer management, and future PCB-containing transformer management plans. Section 2.0 also describes the soil sampling locations and analytical results. Section 3.0 describes conclusions and recommendations for each of the sample locations. Section 4.0 lists the references cited in this report.

There are four appendices attached to this report. Appendix A is the *Fort Devens Interim Standard Operating Procedure, Management of Polychlorinated Biphenyls (PCBs)*, Appendix B is the document, *Environmental Quality Management of Polychlorinated Biphenyls (PCBs)*, Appendix C is the *Transformer Study Protocol* used by Arthur D. Little, and Appendix D is the completed protocol for AREEs 66A through 66F.





2.0 Results of Document Reviews and Interviews

2.1 Previous Studies and Historical Transformer Management

In order to comply with the Toxic Substances Control Act (TSCA), a basewide transformer study was completed in 1982 by the Fort Devens Facility Engineering Support Activity. During the AREE 66 study, each transformer under review was inspected for leaks and was labeled as either a PCB-containing transformer or a non-PCB-containing transformer. During the original 1982 study, more than 900 transformers were inspected and approximately 100 transformers were identified as containing PCBs. There was no documentation regarding the installation and management of transformers on Fort Devens prior to the 1982 survey. Transformers were classified in accordance with TSCA according to the concentration of PCBs in the transformer oil. The classification is as follows:

- PCB Transformer - PCB concentration greater than 500 parts per million (ppm)
- PCB-Contaminated Transformer - PCB concentration ranging from 50-500 ppm
- Non-PCB Transformer - PCB concentration less than 50 ppm

Each transformer was assigned a unique identification number. The transformer location was recorded, and a database was developed to track transformer maintenance activity, which included transformer replacement activity. From 1983 to 1990, the database was managed by the Fort Devens EMO. In 1990, a comprehensive inventory and inspection of transformers located at Fort Devens was conducted. The inspection included collecting oil samples from each transformer to confirm PCB content, and the results were recorded in the existing transformer database. Prior to 1990, PCB transformers were not inspected quarterly. Following the 1990 transformer inspection, the Fort Devens PCB policy required the replacement of all transformers containing PCB oil that exceeded 500 ppm of PCBs. The last transformer that contained PCB oil in excess of 500 ppm was replaced during the summer of 1993, and current records indicate that there are no transformers present at Fort Devens containing PCB oil in excess of 500 ppm.

2.2 Present Transformer Management

Following the update of the transformer database, Fort Devens initiated quarterly inspections of all transformers containing PCB oil. In addition to removing all transformers with PCB oil in excess of 500 ppm, the Fort Devens EMO initiated a program to replace all PCB-contaminated transformers, those transformers with PCB concentrations ranging from 50 to 500 ppm, on the base. General guidelines for the management of PCB transformers are located at the Fort Devens EMO. These guidelines include the *Interim Standard Operating Procedure Management of Polychlorinated Biphenyls (PCBs)*, and the *Environmental Quality Management of Polychlorinated Biphenyls (PCBs)*. These guidelines are located in Appendices A and B, respectively. It should be noted that the transformer data presented in Appendix B

2.0 Results of Document Reviews and Interviews

was current as of October 1992. Fort Devens provides training to all base personnel who may potentially come into contact with PCBs in the workplace. Training includes spill response actions necessary for PCB oil spills.

As part of the document review process that assessed transformer management at Fort Devens, past and present transformer sampling programs were evaluated. During the 1990 basewide sampling program, all samples were sent to a laboratory for analysis. From this analysis each transformer was placed in one of the three above-mentioned PCB classifications based on the concentration of PCB oil. As part of the quality control process, 5 percent of the total number of samples collected were sent to an independent laboratory for a comparison analysis. Fort Devens replaced all PCB-contaminated transformers in 1994. According to Fort Devens personnel, minimal sampling activities of PCB transformer oil will occur in the future as a quality control check to ensure no PCBs are present above 50 ppm in electrical transformers. No sampling of transformer oil took place during the AREE 66 study.

2.3 Identification of Polychlorinated Biphenyl Oil Leaks and Spills

Following a review of the 1982 and 1990 transformer surveys on file at the Fort Devens EMO and DPW a list of transformers that were removed due to leaks or structural damage was generated. Documentation was not available on transformer activity prior to 1982. As a result, the AREE 66 study focused on the 1982 and 1990 transformer surveys performed by Fort Devens. A list of damaged transformers was generated from the survey results. Fort Devens personnel were interviewed for each site where a damaged transformer was reported was inspected. Information regarding the site condition, transformer information, and condition was documented on a field protocol sheet. A print-out of the field protocol is included in Appendix D of this report.

A total of nine locations were identified as having damaged and leaking transformers. Leaks and spills of oil extended in severity from slight staining around drain plugs on transformers to structural transformer failure or transformers falling to the ground and rupturing. Of these nine locations, a total of six sites were recommended for soil sampling based on the extent and nature of the spill and a visual inspection of the site.

2.3.1 Transformers Reported Leaking - Not Sampled

Three transformers were identified as having reported leaks but the electrolyte oil did not reach soil. Each site was visually inspected and Fort Devens personnel involved in managing electrical transformers were interviewed. Based upon the site inspections and interviews, no soil sampling was recommended for these sites. These sites were not included in the AREE 66 study. The following is a description of each site:

2.0 Results of Document Reviews and Interviews

- Behind Building 2001, a small stain was reported on a concrete transformer mounting pad. There was no evidence that the oil contacted the surrounding soil. Visual inspections of the pad confirmed no evidence of further leaks or any evidence of soil staining. This transformer has been changed and contains electrolyte oil with less than 50 ppm of PCBs.
- Two leaks were reported occurring within buildings and involved removal of contaminated concrete. One spill was reported beneath the transformers in the basement of Building 658. A second spill occurred in the electrical room at the Moore Army Airfield. In both spills, all contaminated concrete in the electrical rooms was removed.

2.3.2 Transformer Sites Sampled

There were seven locations where transformers were reported leaking and the electrolyte oil contacted the surrounding soil. Each site was visually inspected and Fort Devens personnel responsible for maintenance of electrical equipment were interviewed. The following describes the seven locations included in the AREE 66 study where soil sampling was performed:

AREE 66A - Building 3752 - Transformer #6414125

This transformer was located behind Building 3752 on a utility pole. The transformer was reported to be leaking in September 1991. The transformer oil contained 549 ppm PCBs and oil staining was noted on the ground around the base of the utility pole. The date the spill was first identified reaching the ground was not recorded. The transformer was removed, but it was unclear from the visual inspection of the site whether any soil was removed.

AREE 66B - Building 1634 - Transformer # Not Recorded

This transformer was located next to Building 1634 on a utility pole. The transformer was reported to be leaking with electrolyte oil contacting the ground. The concentration of PCBs in the electrolyte oil was not recorded on the initial spill report. Although complete documentation of the spill was not recorded, the transformer and an unknown quantity of soil from around the base of the utility pole were removed. The impacted area was most likely the area immediately adjacent to a storm drain manhole. Currently, two utility poles are located side by side at this site.

AREE 66C - Building 3657 - Transformer #7671845

This transformer was located on a utility pole next to the water tank at the Fort Devens golf course. The transformer was found leaking during a routine quarterly inspection and subsequently removed from service in May 1992. A report was not issued identifying the extent of the oil leak, nor was it noted if oil contacted surrounding soils. The transformer was approximately 30 years old. Based on an analysis conducted in 1982, the transformer contained electrolyte oil with a PCB concentration of 316 ppm.

2.0 Results of Document Reviews and Interviews

AREE 66D - Building 3575 - Transformer #6573226

This transformer was located on a utility pole at the corner of MacArthur and Dakota Streets. During a routine replacement of the transformer, the transformer was damaged and approximately 1 pound of electrolyte oil of unknown PCB concentration was spilled onto the surrounding soil. The date of the incident was not recorded. An unknown quantity of soil was removed along with the transformer. The impacted area is approximately 20 feet from a storm drain that flows into Willow Brook.

AREE 66E - Patton Road Substation - Transformer #70B11472 and #3344617

Transformers at the Patton Road Substation were frequently reported to be leaking during quarterly inspections conducted between 1982 and 1990. The electrolyte oil within in each of the transformers has a PCB concentration of 940 ppm. The Patton Road Substation was rebuilt in 1989. A containment barrier for collecting any oil released from the transformers was installed at that time. In addition, the entire site was regraded and new transformer mounting pads were installed. Some of the transformers were replaced in 1989, but the substation and other transformers are approximately 30 years old.

AREE 66F - Building 2025 - Transformer #6287290

This transformer was a pole-mounted transformer that contained electrolyte oil with a PCB concentration of 1,115 ppm. During a storm in August 1991 the pole was pulled down by a falling tree. Oil leaked onto soil when the transformer hit the ground. The transformer was removed, but it was unclear from the site inspection if any soil was removed.

AREE 66G - Verbeck Substation

Following the 1993 transformer study a seventh site, the Verbeck Substation, was included in the AREE 66 study. As part of the basewide transformer evaluation conducted in 1993, the electrical equipment in Verbeck Substation was identified as having documented leaks of PCB-containing oil that reached soil. Visual inspection of the substation during this study showed evidence of staining on and around some of the equipment. The oil within the electrical equipment no longer contained PCBs; however, since the substation has been in operation since 1943, soil sampling was recommended to identify possible PCB contamination within and around the substation. A sampling program was conducted during the summer of 1994.

Electrical equipment located at the Verbeck Substation includes switches, transformers, capacitors, and rectifiers. The entire substation is surrounded by two chain link fences topped with barbed wire. Access is through two locked gates on the south side of the site. The site is covered by coarse gravel. The substation is bounded by a mixed grass slope to the north, by grass and bushes to the east and west, and by West Main Street to the south.

2.0 Results of Document Reviews and Interviews

2.4 Soil Sampling Protocol and Analytical Program

Soil samples were collected in accordance with Arthur D. Little's standard operating procedures (SOPs). These procedures are included in the *Final Quality Assurance Project Plan, Fort Devens, Massachusetts, June 16, 1993*. The samples were collected in accordance with SOP USA - 1008 as follows:

- A stainless-steel hand auger, trowel, and bowl, along with all sampling containers were transported to the site.
- The sampling equipment was rinsed with distilled water in accordance with USAEC procedures.
- Prior to initiating sampling, a sheet of plastic was placed adjacent to the sampling sites for temporary storage of excavated soils.
- All loose debris was removed with a trowel and samples were collected from the soil surface to a depth of 6 inches. Inside the substations, gravel was removed to expose underlying soils to allow for soil sampling.
 - Three soil samples were collected around each of the four pole-mounted transformer locations (AREE 66A, 66B, 66C, and 66D).
 - A total of five samples were collected from the Patton Road Substation (AREE 66E), four from around the containment barrier, and one at the oil-water separator discharge pipe.
 - From the stained soil area next to Building 2025 (AREE 66F), a total of four soil samples were collected, the additional sample being a duplicate sample collected for quality control purposes.
- The collected soil was thoroughly mixed in a stainless-steel bowl and screened with a photoionization detector (PID) prior to placement in pre-labeled sample containers. Samples were not mixed into composites during the AREE 66 study.
- After sampling was complete, the geologic characteristics of the soil were described according to SOP ADL-4014. The remaining soils were returned to the sample excavation, and the topsoil was placed in their original position. A flag was placed at the sampling location and marked with the sample number.
- Documentation of all surface soil sampling procedures was maintained in a dedicated field notebook in accordance with SOP ADL-4014. Records for each site consist of detailed sketches of sample locations.

A total of 41 samples were collected within and around AREE 66G, the Verbeck Substation. Samples were collected in a grid pattern from areas around electrical

2.0 Results of Document Reviews and Interviews

equipment where spills most likely occurred. Samples were also collected from between the two perimeter fences and outside the fenceline to investigate possible contaminant migration beyond the substation's boundaries. No natural or man-made drainage or runoff channels were noted outside the perimeter fence. As a result, samples were collected in a uniform pattern outside the fence. All sampling information, including sample location diagrams and associated site and sample identification codes, was recorded in a field notebook. All samples were collected on July 23, 1993, and were shipped to a USAEC performance-demonstrated laboratory for analysis.

The chemical analysis program for the BRAC EE was directed toward generating data from field and laboratory tests that defined contamination characteristics at sites on Fort Devens. The chemical analytical program for the AREE 66 study followed the Data Quality Objectives (DQOs) established for all of the BRAC EE work. These DQOs and analytical methods are described in the *Final Quality Assurance Project Plan, Fort Devens, Massachusetts, June 16, 1993*.

2.5 Analytical Results

The following discussion presents the sample analytical results for the locations sampled at Fort Devens. PCB 1260 (arochlor 1260) was the only species of PCB detected. One location had non-detections (NDs) for each sample chosen. All other locations had at least one sample indicating some PCB contamination. The samples with detectable concentrations of PCBs were compared to Massachusetts Contingency Plan (MCP) (310 CMR 40.0000) Standards. Method 1 S-1 and GW-1 Standards were used to compare sample results. The Method 1 S-1 and GW-1 Standard of 2 ppm PCB was applied because this is the most health-protective of the MCP Standards. Table 2-1 presents the analytical results for each sample location.

AREE 66A - Building 3752 - Transformer #641425

Three soil samples were collected at this location. Site TRS-93-01A showed a concentration of 0.987 µg/g of arochlor 1260. Site TRS-93-01B showed PCB concentrations below detection limits. Site TRS-93-01C contained arochlor 1260 at a concentration of 6.8 µg/g. Figure 2-1 shows the sample locations in relation to the utility pole and Building 3752.

AREE 66B - Building 1634 - Transformer # Not Recorded

Three samples were collected from this location. Soil from site TRS-93-02B contained arochlor 1260 at a concentration of 3.5 µg/g. Sample TRS-93-02A had an arochlor 1260 concentration of 0.682 µg/g and TRS-93-02C was ND. Figure 2-2 shows the sample locations in relation to the pole, the storm drain, and Building 1634.

2.0 Results of Document Reviews and Interviews

AREE 66C - Building 3657 - Transformer #7671845

Three samples were collected at this location. Sample TRS-93-03A had an arochlor 1260 concentration of 0.639 µg/g. Sample TRS-93-03B had an arochlor 1260 concentration of 1.77 µg/g. At Site TRS-93-03B, arochlor 1260 was detected at a concentration of 4.4 µg/g. Figure 2-3 shows the sample locations in relation to the pole and Building 3657.

AREE 66D - Building 3575 - Transformer #6573226

Three samples were collected at this location. Samples TRS-93-04B and TRS-93-04C had arochlor 1260 concentrations of 0.101 µg/g and 1.08 µg/g, respectively. The third sample was ND. Figure 2-4 shows the sample locations in relation to the pole and the storm drain.

AREE 66E - Patton Road Substation - Transformer #70B11472 and #3344617

Five samples were collected from this location. No PCB contamination was detected. Figure 2-5 shows the sample locations around the containment barrier and at the oil-water separator discharge pipe.

AREE 66F - Building 2025 - Transformer #6287290

Each sample collected from this location indicated PCB contamination. Site TRS-93-06A contained arochlor 1260 at a concentration of 14 µg/g. Site TRS-93-06B contained arochlor 1260 at a concentration of 17 µg/g. Two samples were collected from TRS-93-06C. The regular sample contained arochlor 1260 at a concentration of 69 µg/g and the duplicate sample had arochlor 1260 at a concentration of 55 µg/g. Figure 2-6 shows the sample locations in relation to Building 2025.

AREE 66G - Verbeck Substation

Of the 41 soil samples collected, 25 contained the PCB arochlor 1260 at concentrations greater than the method detection limit of 0.048 µg/g. No other PCB compounds were detected. Of the 25 arochlor 1260-containing samples, five contained concentrations greater than 2 µg/g and were collected from around the rectifiers located on the west side of the substation. The maximum concentration of arochlor 1260, 360 µg/g, was detected at sample point TRS-94-714. No contamination was detected beyond the perimeter fence of the substation. Table 2-1 shows all the analysis results of the samples that contained concentrations of the PCB arochlor 1260 at concentrations greater than 2 µg/g, and Figure 2-7 shows the sample locations.

REV. #	REVISION DATE
1	11/93



BUILDING 3752

UNDERGROUND FUEL
TANK

TRS-93-01A



TRS-93-01C



TRS-93-01B

LEGEND



SOIL SAMPLE LOCATIONS



POLE



PREPARED FOR:
USAEC

DATE: 11/93

DWG. NO.:
67065-090

SCALE:
AS SHOWN

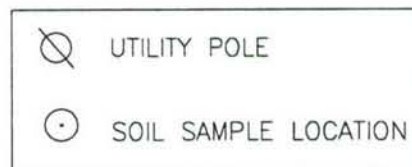
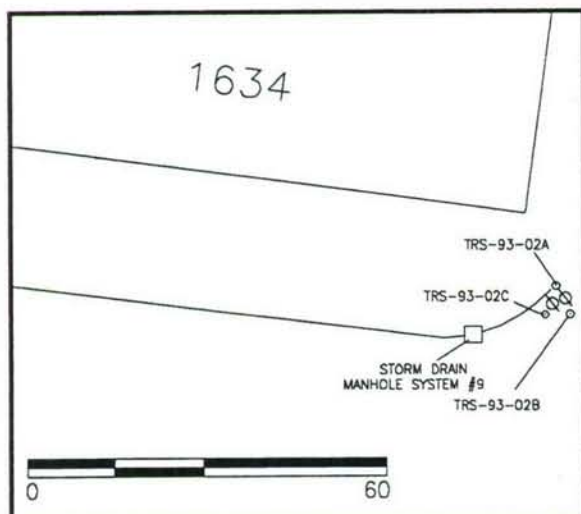
Arthur D Little

TITLE: **Figure 2-1**

AREE 66A

SOIL SAMPLE LOCATIONS AND SITE
IDENTIFICATION CODES

REV #	REVISION DATE
0	11/8/93



PREPARED FOR: USAEC

DATE: NOV. '93

DWG. NO.: 67065-087

SCALE:



Arthur D Little

TITLE:

Figure 2-2
AREE 66B
SOIL SAMPLE LOCATIONS AND
SITE IDENTIFICATION CODES

REV. #	REVISION DATE
0	11/8/93



ROAD

UNNAMED

#3657

TRS-93-03A



TRS-93-03B

TRS-93-03C



PREPARED FOR: USAEC

DATE: NOV. 93

DWG. NO.: 67065-088

SCALE:

AS SHOWN

Arthur D Little

TITLE:

Figure 2-3

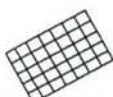
AREE 66C
SOIL SAMPLE LOCATIONS
AND SITE IDENTIFICATION CODES

REV. #	REVISION DATE
1	11/93



MACARTHUR STREET

DAKOTA STREET

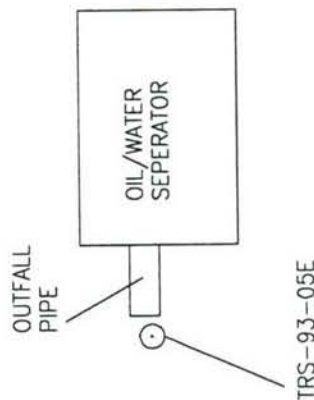
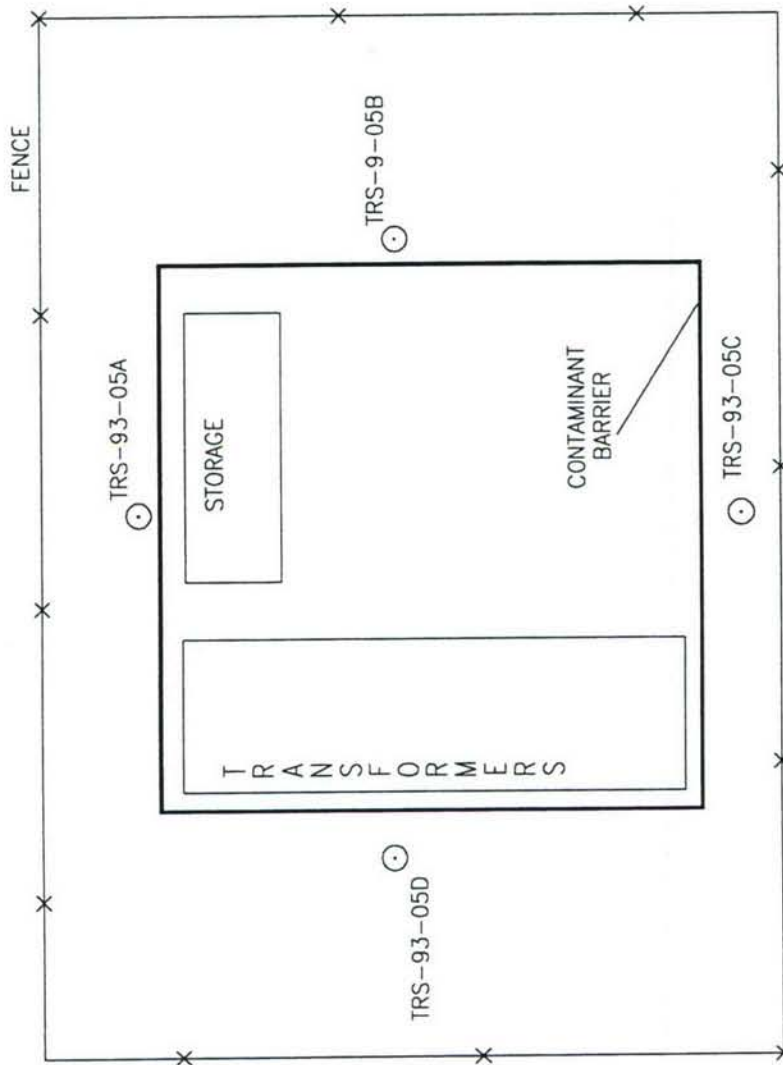


Δ TRS-93-04A
 ∅
 Δ TRS-93-04C Δ TRS-93-04B

LEGEND	
Δ	SOIL SAMPLE LOCATIONS
∅	POLE
	STORM DRAIN MANHOLE



PREPARED FOR:			TITLE: Figure 2-4 AREE 66D SAMPLE LOCATIONS AND SITE IDENTIFICATION CODES
USAEC			
DATE:	DWG. NO.:		
11/93	67065-089		
SCALE:			
AS SHOWN			



REV	DATE
0	5/10/93
1	11/08/93



PATTON ROAD

Figure 2-5 AREE 66E
SOIL SAMPLE LOCATIONS AND SITE IDENTIFICATION CODES

TITLE:

DRAWN BY: (INITIALS)

APPROVED BY: (INITIALS)

USAEC

DWG. NO.

67065-086

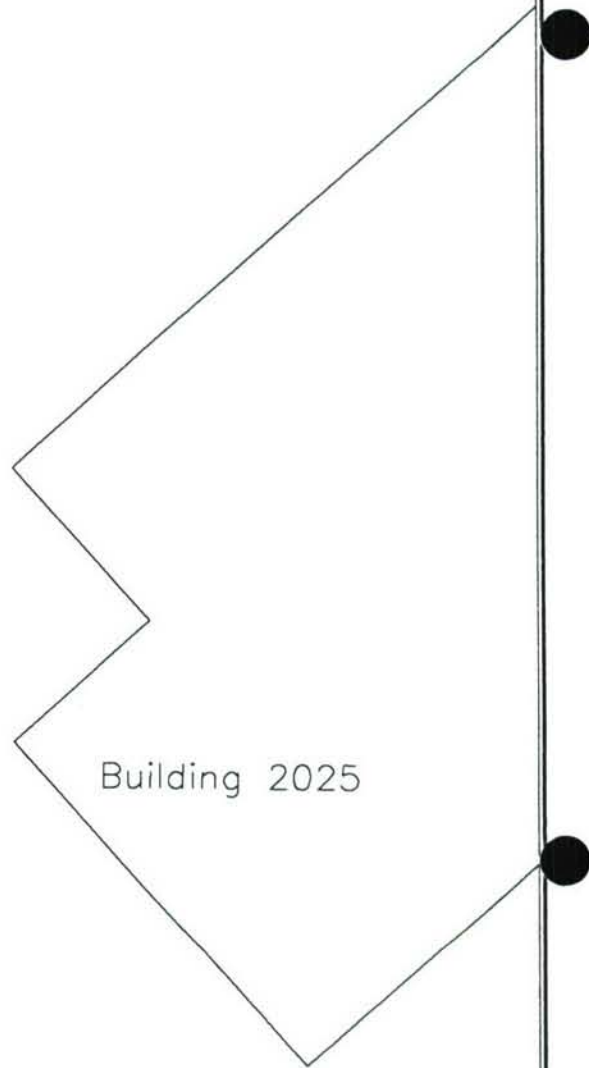
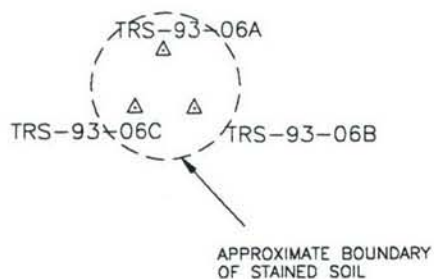
PREPARED FOR:

AS SHOWN

REV. #	REVISION DATE
1	11/93



Ø



LEGEND
△ SOIL SAMPLE LOCATIONS
Ø POLE

0 20 FT.

PREPARED FOR:
USAEC

DATE: 11/93

DWG. NO.: 67065-085

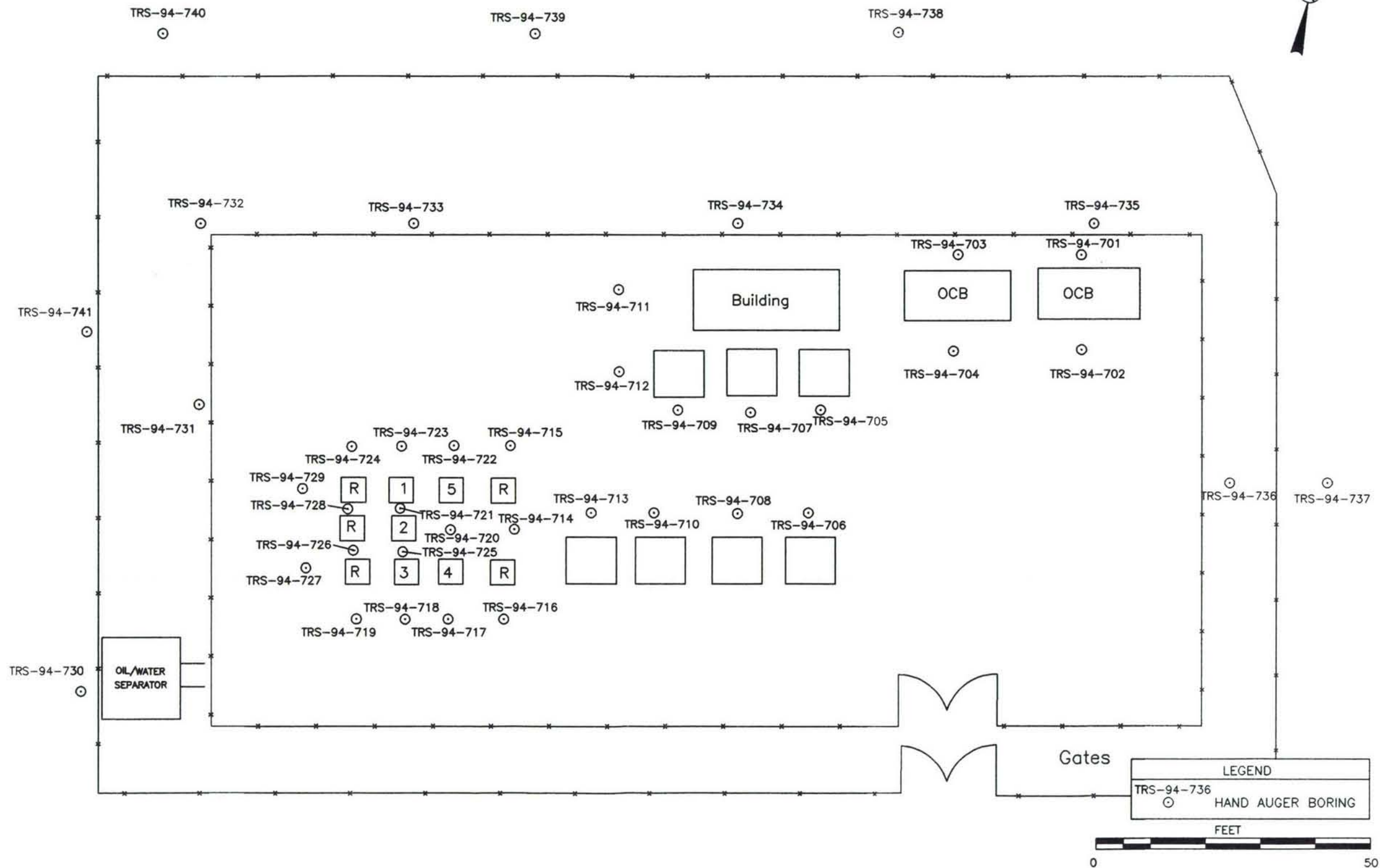
SCALE: AS SHOWN

Arthur D Little

TITLE:

Figure 2-6
AREE 66F
SAMPLE LOCATIONS AND SITE
IDENTIFICATION CODES

REV. #	REVISION DATE
0	6/94




PREPARED FOR: USAEC		DRAWN BY: (INITIALS)			TITLE: Figure 2-7: AREE 66G - Soil Sample Locations and Site Identification Codes
DATE: SEPT. 1994	SCALE: 1 IN. = 20 FT.	DWG. NO. 67065-041	APPROVED BY: (INITIALS)		

Table 2-1: Transformer Study Analytical Results

AREE	Bldg. No Transformer No.	Associated AREE	Date of Spill	Soil PCB Concentration	Recommendation
66A	3752 #641425	NA	9/91	LT 0.987 µg/g 6.8 µg/g	Excavate contaminated soil
66B	1634 # Not Recorded	AREE 70	Not recorded	LT ND 3.5 µg/g .682 µg/g	Excavate contaminated soil
66C	3657 #7671845	NA	5/92	1.77 µg/g 4.4 µg/g .639 µg/g	Excavate contaminated soil
66D	3575 #6573226	NA	Not recorded	ND 1.08 µg/g .101 µg/g	No further action
66E	Patton Rd. Substation #70B11472 #3344617	NA	Leakers identified during quarterly inspections	ND (5 samples)	No further action
66F	2025 #6287290	NA	8/91	14 µg/g 17 µg/g 69 µg/g 55 µg/g	Excavate contaminated soil
66G	Verbeck Substation	NA	NA	TRS-94-714 - 360 µg/g TRS-94-721 - 18 µg/g TRS-94-722 - 4.0 µg/g TRS-94-724 - 3.1 µg/g TRS-94-729 - 2.7 µg/g	Excavate contaminated soil

Note:

AREE - Area Requiring Environmental Evaluation

ND - Non Detected

µg/g - microgram per gram

LT - Less than Detection Limit

NA - Not Applicable

3.0 Conclusions and Recommendations

Six of the seven sites sampled indicated some contamination of the PCB arochlor 1260. No other species of PCBs were detected. A qualitative screening approach using MCP Standards was used to compare the analytical results. Since the ultimate reuse of these areas is unknown, the most conservative soil classification, Method 1, S-1 and GW-1, given in the MCP 310 CMR 40.0000, was selected to determine the residual PCB concentration in soil for determining further action. The maximum allowable PCB concentration for soils under MCP Method 1, S-1 and GW-1 Standard is 2 µg/g, as presented in 310 CMR 40.0975. Samples with PCB concentrations exceeding 2 µg/g were recommended for further action. Further action should consist of excavation of the contaminated site. Furthermore, all site remediation should be conducted in accordance with 40 CFR 761.125 and 310 CMR 40.0000. The following presents the individual conclusions and recommendations for each site sampled during the AREE 66 study.

AREE 66A - Building 3752 - Transformer #641425

One of the three samples collected, sample TRS-93-01C, had an arochlor 1260 concentration of 6.8 µg/g. This is above the accepted level of 2.0 µg/g for PCBs in S-1 soil. Excavation in the area of contamination is recommended. Sampling should occur concurrently with the excavation to ensure that all residual contamination is removed.

AREE 66B - Building 1634 - Transformer #Not Recorded

One of the three samples collected had a PCB concentration above 2.0 µg/g, sample TRS-93-02B had a arochlor 1260 concentration of 3.5 µg/g. Two other samples indicated PCB contamination, sample TRS-93-02A had an arochlor 1260 concentration of 0.68 µg/g, and sample TRS-93-02C with a concentration of 0.056 µg/g, which are well below the recommended 2.0 µg/g limit for S-1 soils. Despite the relatively low concentrations of arochlor 1260, excavation of the contaminated soil at this site is recommended. Sampling should occur concurrently with the excavation to ensure that all residual contamination is removed.

AREE 66C - Building 3657 - Transformer #7671845

One of the three samples collected had a PCB concentration above 2.0 µg/g, sample TRS-93-03B at 4.4 µg/g. The other two samples had PCB concentrations of 0.639 µg/g and 1.77 µg/g, below the recommended 2.0 µg/g limit for S-1 soils. Nonetheless, excavation in the area of contamination was recommended. The U.S. Army Corps of Engineers New England Division performed the excavation in July 1994. A draft NFA document for this site was issued in August 1995.

AREE 66D - Building 3575 - Transformer #6573226

Three samples were collected at this location. None of the samples indicated PCBs in excess of the recommended limit of 2.0 µg/g for S-1 soils. The remediation of this spill was poorly documented, however, Fort Devens records indicate an unknown quantity of soil was excavated in response to the spill. Because there are low levels of PCB contamination detected at this site, it is unlikely that the excavation removed all of the contaminated soil. However, the PCB concentrations detected at this

3.0 Conclusions and Recommendations

location are below recommended limits for S-1 soils. As a result, this site is recommended for NFA.

AREE 66E - Patton Road Substation - Transformers #70B11472 and #3344617

Five samples were collected from this location. None of these samples indicated any PCB contamination. This site, however, had numerous releases due to leaking equipment. In 1989, the current transformer containment pad was installed. Although records did not indicate the amount of excavation associated with the containment pad installation, it is assumed excavation of the area occurred to install the pad. Furthermore, a new oil-water separator was installed at the same time the containment pad was installed. Any releases from the equipment currently in the substation will be captured by the containment pad. AREE 66E is recommended for NFA.

AREE 66F - Building 2025 - Transformer #6287290

This pole-mounted transformer fell down and ruptured on the ground during a storm in 1991. The location where the transformer ruptured was identified by soil staining. All samples collected in the area of staining were in excess of the recommended 2.0 µg/g limit for S-1 soils. This site was reported to the Fort Devens EMO as a spill location. Excavation of the entire location is recommended because all of the concentrations of PCBs detected at this site exceeded 2.0 µg/g. Sampling should occur concurrently with the excavation to ensure that all residual contamination is removed.

AREE 66G - Verbeck Substation

The presence of PCB contamination within and around the Verbeck Substation is restricted to isolated areas within the inner fence of the substation. No PCB contamination was detected beyond the inner fence. Contamination was detected around the electrical equipment on the west side of the substation. Because the contamination is localized, it is recommended that a limited soil removal action be performed around the electrical equipment where soil concentrations of PCBs exceeded MCP standards.

4.0 Selected References

Arthur D. Little, Inc. 1993a. *Draft Supplemental Work Plan, BRAC EE, Fort Devens, Massachusetts*. April 30.

Arthur D. Little, Inc. 1993b. *Final Health and Safety Plan, Fort Devens, Massachusetts*. June 16.

Arthur D. Little, Inc. 1993c. *Final Quality Assurance Project Plan, Volume I and II, Fort Devens, Massachusetts*. June 16.

Arthur D. Little, Inc. 1993d. *Draft Transformer Study Report (AREE 66), Base Realignment and Closure Environmental Evaluation (BRAC EE), Fort Devens, Massachusetts*, November 15.

Arthur D. Little, Inc. 1994. *Transformers (AREE 66) Supplemental Site Evaluation Data Package, Base Realignment and Closure Environmental Evaluation (BRAC EE), Fort Devens, Massachusetts*, October.

Fort Devens. 1992. Environmental Management Office. *Environmental Quality Management of Polychlorinated Biphenyls (PCBs)*. October 30.

Fort Devens. 1992. Directorate of Engineering and Housing. *Interim Standard Operating Procedure Management of Polychlorinated Biphenyls (PCBs)*. March.

Massachusetts Department of Environmental Protection. 1995. Bureau of Waste Site Cleanup. *Revised Massachusetts Contingency Plan (310 CMR 40.0000)*. January 13.

Office of the Federal Register National Archives and Records Administration. 1993. *Code of Federal Regulations 40 part 761*. (40 CFR 761).

U.S. Army Environmental Center. 1992. *Final Enhanced Preliminary Assessment, Fort Devens Massachusetts*. April.

Appendix A: Fort Devens Interim Standard Operating Procedure Management of Polychlorinated Biphenyls

**HEADQUARTERS FORT DEVENS
DIRECTORATE OF ENGINEERING AND HOUSING
FORT DEVENS, MASSACHUSETTS 01433**

**INTERIM STANDARD OPERATING PROCEDURE
MANAGEMENT OF POLYCHLORINATED BIPHENYLS (PCBs)**

FEBRUARY 1986

REVISED NOVEMBER 1988

REVISED MARCH 1992

The undersigned have read fully, understand, and agree to comply with the Standard Operating Procedure Plan written for the Installation and attached hereto and incorporated herein.

DATE: _____

BY: _____
RICHARD W. HOOVER
COL, EN
Installation Commander

DATE: _____

BY: _____
CARROL J. HOWARD
LTC, IN
Installation Environmental
Management Officer

DATE: _____

BY: _____
DENNIS R. DOWDY
LTC, EN
Director of Engineering and Housing

TABLE OF CONTENTS

<u>SECTION</u>		<u>PAGE</u>
1.0	Purpose & Scope-----	1
2.0	Reference-----	2
3.0	Background-----	3
3.1	Program Overview-----	4
4.0	Definitions-----	5
5.0	Responsibilities-----	6
5.1	Environmental Management Office-----	6
5.2	DEH Operations Division-----	6
5.3	DEH EP&S Division-----	7
5.4	DRMO-----	8
5.5	DOL-----	8
6.0	Storage Requirements-----	8
6.1	Storage of PCB Items-----	9
6.2	Storage Building Requirements-----	10
7.0	Handling & Transportation Requirements-----	10
8.0	Inspection Requirements-----	12
8.1	PCB Transformers-----	12
8.2	Temporary Transformer Storage Bldg-----	12
8.3	Inspection Reporting & Deficiencies-----	13
9.0	PCB Item Use Requirements-----	14
9.1	Labelling-----	15
10.0	Disposal Requirements-----	15
11.0	Safety & Health Requirements-----	15
12.0	Training Requirements-----	17

APPENDICES

	<u>PAGE</u>
A Transformer Data Sheet	A-1
B PCB Equipment and Transformer Quarterly Inspection Form	B-1
C Weekly Inspection Form	C-1
D Transport Vehicle Marking	D-1
E PCB Label	E-1
F PCB Contaminated Label	F-1
G Non PCB Label	G-1
H Hazardous Waste Label	H-1
I Table 3. Respiratory Protection Guidelines	I-1
J List of Transformers on Fort Devens	J-1

INTERIM 11 MAR 1992

STANDARD OPERATING PROCEDURE (SOP)

1.0 SCOPE

1.1 PURPOSE: The Polychlorinated Biphenyls (PCBs) Standard Operating Procedure is designed to provide updated information and assistance to Fort Devens activities in the safe handling, storage, and disposal of PCBs. Further, it presents a concise summary of the regulations, provides practical guidance for implementing these requirements and outlines methodology for assessing activity PCB compliance.

1.2 SCOPE: This SOP covers the proper procedures for Fort Devens activities and tenants to manage their PCB items in accordance with Federal, Army, and State of Massachusetts regulations. Fort Devens activities primarily use PCBs as dielectric fluid in electrical equipment and therefore, this SOP focuses on the operating procedures for PCB electrical equipment. All aspects of PCB management are covered, from inventory to disposal. This SOP specifies the operational requirements and prohibitions and provides recommendations on personnel protective equipment, spill prevention measures, and emergency response procedures.

1.3 APPLICABILITY: This SOP is applicable to all Fort Devens units, staff and tenant activities using, storing, disposing or otherwise handling equipment or material containing PCBs in detectable concentrations. The PCB management program is under the direction of the Deputy Installation Commander's - Environmental Task Force and all questions should be directed to the Hazardous Materials Manager or the PCB Coordinator (x3002).

INTERIM 11 MAR 1992

STANDARD OPERATING PROCEDURE

2.0 REFERENCE:

- A. AR 200-1, dated, 23 April 1990, Environmental Protection and Enhancement, para 5-6.
- B. USAEHA Technical Guide TG-136, Apr 1984, Hazardous Waste Management, Appendix H.
- C. Code of Federal Regulations, EPA, Toxic Substances Control Act (TSCA), 40 CFR 761 - Polychlorinated Biphenyls, 7/1/91 as amended.
- D. Code of Federal Regulations, EPA, Resource Recovery & Conservation Act (RCRA), 40 CFR 260, 7/1/91 as amended.
- E. State of Mass Regulations, 310 CMR 30.00 and GL 21.C
- F. Massachusetts Part B Hazardous Waste TSDF permit MA7210025154, Fort Devens, MA
- G. PCB Spill Prevention Control & Countermeasure Plan (SPCC), Fort Devens, MA. 1983 as revised 1989.
- H. Code of Federal Regulations, U.S. Department of Labor Occupational Safety and Health Administration, 29 CFR 1910 OSHA 2206 rev. 1983

All the above referenced publications are on file in the Environmental Task Force's Office, for review.

↓
Bldg 689

3.0 BACKGROUND:

Polychlorinated Biphenyls, better known as PCBs, are a group of toxic chemicals belonging to the chlorinated hydrocarbon family. In the past, many chemicals belonging to this family, such as DDT, chlordane, dieldrin, and dioxin have received notoriety due to known environmental and health problems. The physical and chemical properties of PCBs include high capacity for heat, low flammability, high stability, low vapor pressure, and low electrical conductivity. PCBs have been used extensively as insulators and coolants in electrical equipment, especially in electrical transformers in and around buildings where the danger of fire exists. PCBs have also been used in capacitors, fluorescent light ballasts, electrical appliances, and motors. To a lesser extent, they have been used in paints, adhesives, caulking compounds, plasticizers, lubricants, hydraulic and heat transfer systems, carbonless copy paper, sealants, coatings, and dust control agents.

In 1976, Congress passed the Toxic Substance Control Act (TSCA PL 94-469) and specifically directed the Environmental Protection Agency (EPA) to develop regulations regarding the manufacture, processing, distribution in commerce, use and disposal of polychlorinated biphenyls (PCBs). Congress took this action because it believed that the chemical and toxicological properties of PCB were such that their continued manufacture and use would pose significant risk to public health and the environment.

EPA's concern was based on investigations during the 1970's that identified potential health problems resulting from exposure to PCBs. PCBs can cause irritation to the eyes, skin and lungs from contact and it has been suspected that PCBs may cause cancer. To date there is still not enough evidence to prove PCB cause cancer in humans. However, because PCBs are very stable and very slow to break down (degrade), PCBs accumulate in the environment and, more specifically, they accumulate in human fat tissue. Based on the possible health effects and the knowledge that PCBs were already accumulating in humans, EPA developed the TSCA PCB regulations (40 CFR 761, reference 1) prohibiting the manufacturing, distribution and use of PCBs except in a totally enclosed manner. The TSCA regulations authorize certain uses (as totally enclosed) of PCBs provided the uses comply with proper procedures and operational conditions. (ref. 1 PCB Program Mgt Guide, USN 1986).

When high concentration PCBs are incompletely burned, they generate other toxic chemicals, dioxin's and tetrafurans, which are some of the most deadly chemicals known. Because of this experience, EPA has issued more stringent regulations aimed at

avoiding heat related incidents and providing for extensive reporting of such incidents to the EPA.

Cleanup from such heat-related incidents averages from 25 to 40 million dollars per incident! Very small "incidents" involving small quantities of PCB can cost millions to clean up, for example, 3 lbs. of PCB released during a fire in Connecticut and cost 3.5 million to clean up. Several DOD incidents have cost over 25 million dollars each to clean up. Besides the high clean-up costs, buildings have had to be vacated for years for the clean up to take place. Virtually all "personal" equipment - desks, chairs, computers, etc. has to be destroyed because of contamination.

3.1 PCB Program Overview:

To ensure that PCBs are appropriately managed on Fort Devens, a PCB Management Program has been developed, consisting of the assignment of a PCB Coordinator and the development of an inventory of PCB items, a compliance evaluation, risk assessments, operational guidance and compliance inspections.

4.0 DEFINITIONS:

A. **PCB Transformer:** Any transformer that contains 500 ppm (parts per million) PCBs or greater.

B. **PCB Contaminated Transformer:** Any transformer that contains 50 ppm PCB or greater, but less than 500 ppm.

C. **Capacitor:** Any device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric (insulating) fluid or material.
Types of capacitors are as follows:

Small capacitor: A capacitor which contains less than 1.36 kg (3 lbs.) of dielectric fluid.

Large high voltage capacitor: A capacitor which contains 1.36 kg or more dielectric fluid and which operates at 2000 volts or more (AC or DC).

Large low voltage capacitor: A capacitor which contains 1.36 kg or more dielectric fluid and which operates at less than 2000 volts (AC or DC).

D. **PCB Article:** Any manufactured article, other than a PCB container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. "PCB article" includes capacitors, transformers, electric motors, pumps, pipes and any other manufactured item which contains PCBs.

E. **PCB Item:** Any PCB article, PCB article container, PCB container, or PCB equipment that contains any PCBs.

F. Additional and more detailed definitions may be found in 40 CFR 761. (Available in the Environmental Task Force's Office)

1
Bldg 684

5.0 RESPONSIBILITIES:

5.1 Environmental Management Office Responsibilities:

- A. The Chief, Environmental Task Force will appoint a PCB Coordinator who will be responsible for overall PCB program coordination and implementation.
- B. Will advise Staff, Units and Tenants on proper procedures for the use, storage and disposal of PCB items.
- C. Will maintain a list (the PCB Log) of all PCB items on post, including documentation for any PCB items moved, placed in storage or disposed. Further, will provide this information to the Fort Devens Fire Department, Safety and Preventive Medicine Offices.
- D. Will monitor activities using PCBs and coordinate handling PCB items.
- E. Will prepare and maintain all annual reports required by the EPA and the State of Massachusetts involving PCB activities.
- F. Will Operate an EPA permitted storage facility to properly store PCB items, containers and PCB liquids as required.
- G. Will coordinate all PCB training and maintain a log of all PCB training received by Fort Devens Personnel.
- H. Will maintain a PCB Spill Prevention, Control and Countermeasure plan (SPCC Plan) as required by 40 CFR 112, and will provide emergency coordination in case of emergency as directed by the SPCC plan.
- I. Will assure that all personnel handling PCBs on a routine basis participate in PCB monitoring through Preventive Medicine's Medical Monitoring Program.

5.2 DEH Operations Division Responsibilities:

- A. Coordinate with the Environmental Task Force in any activity involving the handling, transportation, storage or change in status of PCB equipment.
- B. Complete required documentation (Transformer data sheets, see Appendix A) when changing the status of PCB equipment in any way and will assist the Environmental Task Force in sampling equipment to determine PCB Status.

- C. Perform all operations involving PCB equipment, PCB liquids, or PCB contaminated equipment in a safe and responsible manner, taking particular precaution to prevent spills, leaks, drips or any release of PCBs into the environment.
- D. Provide and require the use of PCB impervious protective gloves to linemen working on PCB or PCB contaminated equipment. Follow other protective equipment requirements as directed according to the specific situations and exposure levels encountered.
- E. Maintain the PCB Temporary Transformer Storage area according to the requirements outlined in Section 5 "Storage Requirements".
- F. Inspect PCB Transformers and the DEH Temporary Transformer Storage facility as outlined in Section 7 "Inspection Requirements"; including quarterly inspection of PCB transformers (see Appendix B) and monthly inspection of the Temporary Transformer Storage Facility (see Appendix C).
- G. Provide training to all persons handling PCB equipment in (1) proper and safe handling methods for PCB items, (2) proper protective equipment (3) Spill prevention, control and countermeasure (SPCC) procedures as outlined in the SPCC plan and (4) Inspection techniques for use when inspecting transformers.
- H. Will assure that employees routinely handling PCB items are enrolled in the PCB background level testing program provided by Preventive Medicine.
- I. Will assure that employees routinely exposed to PCB items are enrolled in the Medical Monitoring Program through the Preventive Medicine and Safety Office.

5.3 DEH EP&S Responsibilities:

- A. The possibility of PCBs will be taken into consideration during any design work involving the movement, replacement, or altering the status of any electrical transformers, substations, or capacitor banks. Such work will be coordinated with the Environmental Task Force to identify PCB items and assure proper and safe handling.
- B. Notify the Environmental Task Force of any contracts involving PCBs and transformers and include language in the contract requiring that the Contractor follow this SOP and the manifesting SOP that is available at the Environmental Task Force.

C. All disposal of PCB items will be done through the Environmental Task Force in coordination with DRMO, local contracts will not be used to dispose of PCB items.

5.4 Defense Reutilization Marketing Service Responsibilities:

It shall be the responsibility of the Defense Reutilization Marketing Office (DRMO) to ensure that equipment that is turned in for disposal and is to be sold as scrap, or as a whole does not contain PCBs. All PCB capacitors, ballasts, transformers, etc. must be removed **before** accepting the equipment.

5.5 Directorate of Logistics Responsibilities:

All electrical and electronic equipment that is turned in by Fort Devens tenants, staff, activities or supported facilities to the DRMO for scrap shall be examined for PCB capacitors and ballasts. All PCB capacitors and ballasts shall be removed by the DOL activity and handled as Hazardous Waste.

6. STORAGE REQUIREMENTS:

A. **No outside storage of PCB items shall be permitted.** All PCB items stored, or stored for disposal must be stored inside a designated storage building, (either bldg. 1484 or bldg. 1650).

B. All PCB items not in acceptable use must be stored in building 1650 (Hazardous Waste Storage Facility) or building 1484 (DEH Temporary Transformer Storage Facility) as specified below:

Non-leaking PCB articles and PCB equipment will be stored in b. 1484, provided that the integrity of the casing is intact and that no PCB can escape through bushings, holes, or seeping seams on the case and further, that the equipment is labeled and inspected as required by this SOP.

Containerized, leaking PCB articles and PCB equipment, will be stored in bldg. 1484, provided that all fluids are previously drained, or that the PCB items are placed in a non-leaking PCB container that contains sufficient absorbent material to absorb any liquid PCBs remaining in the item and is labelled and inspected as required by this SOP.

All other PCB items, not specifically mentioned above, will be stored in building 1650.

NO TEMPORARY STORAGE OF LIQUID PCBs outside building 1650 is allowed.

6.1 Requirements for Storage of PCB items:

6.1.1 Log: All items placed in storage shall be logged in (date) by the Electric Shop. Appropriate labels shall be attached after inspection.

6.1.2 Labelling: Weatherproof labels, clearly written in indelible ink, must be attached to each item in storage in accordance with TSCA and MADEP requirements, and include the following information:

The PCB Status (PCB or PCB contaminated) (show the concentration if known);
The date removed from service;

If the equipment is stored for disposal, then a MADEP hazardous waste label must also be applied, giving the following information:

The words "Hazardous waste";
The name of the hazardous substance "PCB Dielectric Fluid";
The associated hazard "TOXIC";
The date removed from service.

6.1.3 Storage Time Limitations:

A. Items held for disposal in bldg. 1484 will not be held more than 90 days before being transported to a permitted TSDF facility.

B. Items held for disposal in building 1650 and 1484 must be disposed of before one year from the date removed from service. Items will be turned in as generated on DD Form 1348 to the DRMO within seven days of receipt.

Note: The term "Disposed of before 1 year" includes the time to transport to a hazardous waste treatment facility, therefore, must be moved to DRMO at least 180 days prior to the one year.

6.1.4 On-Post Transportation Requirements: PCB items will be delivered to the facility (Building 1650 or building 1484) **only after coordination with the Environmental Task Force (X 3002)** and in strict accordance with the procedures specified by the Environmental Task Force, in conjunction with Preventive Medicine and Safety, to be used during removal and transfer.

6.2 Requirements for Storage Buildings: Storage buildings used for storage of PCB and PCB contaminated items will meet the following standards:

Spill containment: A containment area surrounded by a berm, 6" high and capable of containing 200% of the largest container or 25% of the total permitted volume, whichever is greater.

Weather Protection: A roof, walls and doors to restrict entry and to provide weather protection.

Impervious Floor: An impervious floor covering so that PCBs spilled will not penetrate the floor (i.e. epoxy coating). No floor drains, cracks or expansion joints will be permitted.

Security: The building will be secured when not in active use, unauthorized personnel will not be allowed unescorted access.

PCB Markings: The building will be marked as a PCB storage area and as a Hazardous Waste accumulation area or HW storage facility.

7. HANDLING & TRANSPORTATION REQUIREMENTS:

Reporting PCB equipment status changes: The Environmental Task Force will be advised of any movement of PCB or PCB Contaminated equipment. Specific instructions will be given in cases of leaking equipment or PCB (over 500 ppm) equipment which may have overheated.

Transformer Data Sheets: All transformers placed into or removed from service must receive immediate proper storage and be documented with attached form (see Appendix A), a copy shall be furnished to the Environmental Task Force. These requirements will be the responsibility of the activity directing the action - EP&S, Estimators, Electric Shop, Corps of Engineers, etc.

Transport Vehicle Marking: Any vehicle transporting more than 45 kg. (99.4 lbs.) of liquid PCB or one PCB transformer must be marked in accordance with 40 CFR 761.40(b). The DEH Electric Shop has been provided the proper M_1 placards for each side of a vehicle (see Appendix D).

Safety of Workers Handling PCB equipment: Every precaution will be taken during the handling and removal of PCB or PCB contaminated equipment to assure the safety of workers and to prevent any release of PCBs into the environment as outlined in section 10, Safety & Health. Measures to be taken include, but are not limited to:

1. The use of protective equipment as outline in this SOP.
2. Tightening bushings or closing openings in a carcass to prevent fluid from escaping.
3. Wrapping the transformer in plastic during handling operations.
4. Placing plastic on all ground areas to prevent any spilled fluid from getting on the ground.
5. If the equipment is visibly leaking, additional measures will be specified to prevent any possible release of PCBs into the environment.

Spill Reporting: All Spills of PCBs will be reported immediately to, first, the DEH Fire Department (x2117) and then to the Environmental Task Force (x3002). In the event that the Environmental Task Force can not be contacted, the generator shall notify the following agencies:

- National Response Center, U.S. Coast Guard Duty Office, Washington D.C. 9-1-800-424-8802 24 hrs/day.
- EPA, Oil and Hazardous Material Section, Regional Response Center, Lexington, MA 9-1-617-223-7265 24 hrs/day.
- Massachusetts Department of Environmental Protection 9-1-792-7653.
- After Working Hours of the Massachusetts Department of Environmental Protection call the Massachusetts State Police 9-1-537-2188.

In the event of a spill, clean-up efforts shall be taken immediately, following the guidance of the PCB Spill Control and Countermeasure Plan (SPCC Plan).

Reporting of Heat-Related Incidents: If it appears that the piece of PCB (over 500 ppm) equipment has overheated or otherwise been involved in a heat-related incident or fire (see definitions), then all work will cease, the fire department and the EMO be immediately notified, and work continue only after the situation has been surveyed and appropriate measures prescribed.

Decontamination: No material or equipment which comes in contact with liquid PCBs, including tools, equipment or clean-up material, shall be removed from the site or storage facility, or used, removed, or disposed of, without thorough decontamination and consultation with the Environmental Task Force.

Unlabeled Equipment: All equipment which contains oil dielectric, and is not otherwise labelled, shall be assumed to be PCB contaminated and handled accordingly. Where unlabeled equipment is removed from service, and oil sample shall be taken by the Environmental Task Force for testing and determination of PCB content.

Testing: The testing of electrical devices taken out of service shall be accomplished by the Environmental Task Force. All data related to PCBs shall be kept on file by the Environmental Task Force.

8. INSPECTION REQUIREMENTS:

8.1 Transformer Inspection: PCB Transformers (over 500 ppm) will be inspected quarterly by the Operations Division. This inspection form (see Appendix B) shall be submitted to the Environmental Task Force by the 15th of March, June, September, and December. The following items will be examined:

1. **Signs of dampness** visible on the outside of the transformer which would indicate release of PCBs, as well as obvious leaks or drips from valves or fittings.
2. Signs of low oil level, high temperature, overloading or other **operational problems** which would indicate impending problems.
3. **Signs of a heat related incident**, obvious overheating, soot stains, etc.
4. Signs of faulty **electrical connections**.
5. **Labelling**, both on the transformer itself and proper labelling at every access to a transformer vault or fenced substation.
6. Integrity of **spill containment** basins.
7. **Housekeeping**, No combustible material shall be stored within a PCB Transformer Vault or within 15' of a PCB transformer in an open cage or accessible area.

8.2 Temporary Transformer Storage Building: A log of inspections shall be kept by the DEH Electric Shop for at least three years after each inspection or until final closure of facility whichever is greater. The building shall be inspected weekly by the Operations Division. A copy of the inspection form (see Appendix C) shall be submitted to the Environmental Task Force each week. The above items shall be examined for each PCB article in the building. In addition, the following shall be examined:

1. No combustibles stored within building.
2. Integrity of floor, no cracks, expansion joints or drains which would allow PCB to be released.

3. Proper labelling.
4. Access restricted to authorized personnel at all times.
5. Proper containerizing of leaking equipment.
6. Availability of Spill cleanup equipment as outlined in the PCB SPCC plan.
7. That all PCB articles are labelled as to PCB status, date removed from service, and if unserviceable or in storage for disposal, the words "HAZARDOUS WASTE" on each piece of equipment.
8. List each PCB article in storage over 30 days.

8.3 Inspection Reporting & Deficiency Correction: All results of inspection, including description of problems found, shall be detailed on the inspection form (see Appendix C). Where no problems were found, the inspector shall so certify directly on the form.

Deficiency Correction: Any deficiencies found shall be promptly corrected. Where corrective action is needed, such actions shall be promptly initiated by the Chief of the Operations Division. Copies of the inspection forms, if deficiencies are noted, shall be submitted to the Inspector General within 24 hours after completion of inspection. Chief of Operations Division shall follow the Internal Controls procedure to complete the Material Weakness Form.

Annual Inspection: An annual inspection shall be done by the Environmental Task Force immediately before preparation of the PCB Annual Document Log.

9.0 USE REQUIREMENTS (for PCB equipment in service)

Storage of Combustibles prohibited: No combustible materials shall be stored within 15' of any PCB transformer.

Marking Access points & Vaults: Structures containing PCB equipment will be clearly labelled (using mark M_L) at each point of access. (See section "Labelling").

Reporting of Releases: All Spills, leaks, or other releases of PCBs will be reported immediately to, first, the DEH Fire Department (x2117) and then to the Environmental Task Force (x3002). In the event that the Environmental Task Force can not be contacted, the generator shall notify the following agencies:

- National Response Center, U.S. Coast Guard Duty Office, Washington D.C. 9-1-800-424-8802 24 hrs/day.
- EPA, Oil and Hazardous Material Section, Regional Response Center, Lexington, MA 9-1-617-223-7265 24 hrs/day.
- Massachusetts Department of Environmental Protection 9-1-792-7653.
- After Working Hours of the Massachusetts Department of Environmental Protection call the Massachusetts State Police 9-1-537-2188.

9.1 Labelling

PCB or PCB Contaminated Label: All PCB transformers shall be labelled with an approved label ("M_L") on the face of the transformer and at every access point to any transformer vault or substation (see Appendix E). PCB contaminated transformers shall be labelled with a "PCB Contaminated" label (see Appendix F). The actual concentration of PCB fluid in the equipment shall be shown when known.

Non PCB Label: All non-PCB transformers and capacitors (less than 50 ppm PCB) shall be labelled with an approved "Non PCB" label (blue label), the date of testing and the resulting concentration (see Appendix G). The letters NDL shall indicate "Not detectable level".

Unlabeled Equipment: Federal Regulations state that unless a transformer has information on the name plate or a chemical analysis which indicates the dielectric fluid is not a PCB, then the transformer must be considered a PCB transformer and labelled and handled as such. The rule further states that all "oil filled" transformers must be considered "PCB contaminated" until proven otherwise through testing.

Label Removal Prohibited: No PCB, PCB Contaminated, or Non PCB labels will be removed from electrical equipment under any

circumstances without the express agreement of the Environmental Task Force.

10.0 DISPOSAL REQUIREMENTS:

Legal Responsibility: The legal responsibility for the proper disposal of PCB items rests with the Installation Commander, and is administered by the Environmental Task Force. No PCB items will be disposed of, i.e. sold, removed, buried or otherwise destroyed without prior consultation with the Environmental Task Force.

Coordination with DRMO: Disposal of all PCB items will be through the ~~Defense Reutilization and Marketing Service (DRMS)~~ and the local Defense Reutilization and Marketing Office (DRMO) via DD form 1348 and DRMS guidance. *Just use DRMO Ben*

Proper Disposal of Spill Debris: Disposal of Spill debris and clean-up material will be by licensed transporter and disposal facilities or through DRMS at the Discretion of the Spill Response Coordinator.

Storage Time Limitation: In no case shall PCB items, PCB liquids, or PCB spill debris be kept in storage greater than nine months.

Unauthorized Releases Prohibited: Any release of PCB fluid into the environment (spills, leaks, etc.) constitute unauthorized disposal, and may generate sanctions if not handled in accordance with 40 CFR 761.

11.0 SAFETY AND HEALTH REQUIREMENTS:

A. Personnel Safety

1. **Respirator Protection:** The U.S. Department of Health and Human Services, National Institute of Occupational Safety and Health (NIOSH) recommendations to minimize exposure to PCBs include keeping the airborne concentration no higher than 1 ug/M³, on a time-weighted average basis. This level is normally met by ventilation of closed spaces containing PCB equipment. Under certain conditions, listed here, this degree of protection may be used by use of appropriate respirators:

- During the time necessary to install or test the required engineering controls.
- During non-routine maintenance or repair activity
- During emergencies when concentrations of airborne PCBs may exceed the permissible limit.

To meet the respiratory protection requirements for varied conditions of exposure to PCBs, Table 3 (see Appendix I) prescribes guidelines for use. Evaluation must be made based upon conditions encountered with each potential exposure to PCBs.

2. Environmental Monitoring: Monitoring the concentration of PCB vapors must be performed during spill cleanup for two reasons. It will indicate when the cleanup personnel can safely remove their respirators, and will indicate when the area is safe for entry by unprotected personnel. The Industrial Hygienist (X 2460) has expertise in air monitoring for PCB concentration with the MSA Model G pump.

3. Personal Protective Equipment and Clothing: Protective equipment and clothing use must be evaluated for each incident. Eye protection and gloves will always be necessary. Coveralls (or aprons) and boots will be required when it is likely that other parts of the skin will come in contact with PCBs or PCB contaminated material. Since no material is impervious, contact Environmental Task Force (x3002) or Industrial Hygiene (x 2460) for guidance on how long any given material can be expected to provide adequate protection. Clothing contaminated with PCBs must be stored in plastic bags and disposed of in approved containers.

4. Sanitation Practices: Shower facilities shall be available to all personnel exposed to PCBs and shall be used by all personnel working with PCBs before changing to street clothing.

Employees must wash their hands before eating, drinking, smoking, or using toilet facilities during work with PCBs. Food, drink, and smoking materials shall not be allowed in areas where PCBs are handled or in PCB spill areas.

5. Medical: Preventive Medicine has set up a medical program for personnel who may be expected to come in contact with PCBs. The medical program is designed to periodically examine potentially exposed personnel to make sure that their working with or around PCBs is not affecting their health. Details of the medical surveillance program may be obtained from Preventive Medicine. Included are:

- All Electric Shop Lineman
- All Environmental Management Hazardous Waste personnel.
- All female workers of child-bearing age must be advised of the possibility that exposure to PCBs could, potentially, adversely affect an unborn child. Those who bear children while working with or around PCBs must be counselled about

the possibility that there could be PCBs in their milk, and the effect that could have on their children if they nurse.

12. PCB TRAINING AND EDUCATION REQUIREMENTS:

Training and education of employees in safe working practices is the key to reducing and/or eliminating exposure to PCBs. Therefore, each activity shall initiate an educational program which will ensure that all employees occupationally exposed to PCBs have knowledge of job hazards, proper maintenance and cleanup methods, and proper use of protective clothing and equipment. Annual review sessions are required. Additional information and assistance is available from Environmental Task Force (x3002).

1. The training must include, as a minimum:

- Proper use of protective clothing and equipment whenever the potential for exposure to PCBs may exist. This should include the fact that PCBs will penetrate protective clothing if they are in contact with it for a long enough period.
- Use, fitting, care and maintenance of respirators. Location of Self-contained Breathing Apparatus (SCBA) if maintained by other users.
- General description of the medical surveillance program and its advantages for the employees.
- Inform all present and new employees working with PCBs of the hazards, relevant symptoms and effects of overexposure to PCBs and precautions to be observed for safe use and handling of these materials.
- Make female employees aware of the potential adverse effects of PCBs on the unborn child and of the known transport of PCBs to the breast milk.
- Emergency procedures; periodic drills to be conducted.
- Decontamination procedures for site and equipment.
- First aid procedures, equipment location and use.
- Sanitation procedures.

2. Information explaining the hazards of PCB exposure should be kept on file and available to employees. Appropriate

INTERIM 11 MAR 1992

STANDARD OPERATING PROCEDURE

warning signs and labels must be affixed whenever required and informational posters shall be posted in the workplace.

3. Records of employee training in the safe handling of PCB's will be maintained by the Environmental Task Force and in the Employees Personnel file.

INTERIM 11 MAR 1992

STANDARD OPERATING PROCEDURE

Appendix A
Transformer Data Sheet

INTERIM 11 MAR 1992

STANDARD OPERATING PROCEDURE

Appendix B
PCB Equipment & Transformer Quarterly Inspection Form

Appendix B: Environmental Quality Management of Polychlorinated Biphenyls

DEPARTMENT OF THE ARMY
HEADQUARTERS FORT DEVENS
Fort Devens, Massachusetts 01433-5000
30 October 1992

FD Regulation 200-2

Environmental Quality
MANAGEMENT OF POLYCHLORINATED BIPHENYLS (PCBs)

SUMMARY. This regulation covers the safe handling, storage, and disposal of PCBs. It gives a summary of existing regulations, provides practical guidance for implementing requirements and outlines methodology for assessing activity PCB compliance.

APPLICABILITY. This regulation applies to Fort Devens units, staff and tenant activities using, storing, disposing or otherwise handling equipment or material containing PCBs.

IMPACT ON THE NEW MANNING SYSTEM. This regulation does not contain information that affects the New Manning System.

FORMS AND LABELS. Forms and labels mentioned in this regulation may be obtained through the Environmental Management Office, Box 19, Fort Devens, MA 01433-5190.

SUPPLEMENTATION. Local supplementation of this regulation and establishment of forms are prohibited, except upon approval of the Installation Environmental Management Office. Requests for exception, with justification, will be sent to Commander, Headquarters Fort Devens, ATTN: AFZD-EM, Fort Devens, MA 01433-5190.

SUGGESTED IMPROVEMENTS. The proponent agency of this regulation is the Installation Environmental Management Office. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms), to Commander, Headquarters, Fort Devens, ATTN: AFZD-EM, Fort Devens, MA 01433-5190.

TABLE OF CONTENTS

CHAPTER 1		
GENERAL		
1-1 Purpose		2
1-2 Responsibilities		3
1-3 References		5
CHAPTER 2		
BACKGROUND		
2-1 Polychlorinated Biphenyls (PCBs)		5
2-2 Toxic Substance Control Act (TSCA)		6
2-3 Health Issues		6
2-4 Cost of Clean-up		6
CHAPTER 3		
STORAGE		
3-1 Labeling Procedures		6
3-2 Designated Storage Areas		6
3-3 Storage Time Limitations		7
3-4 Specifications for PCB Storage Buildings		7
CHAPTER 4		
HANDLING AND TRANSPORTATION		
4-1 On-Post Transportation Requirements		7
4-2 Reporting PCB Equipment Status Changes		8
4-3 Transformer Data Sheets		8
4-4 Transport Vehicle Markings		8
4-5 Safety of Workers Handling PCB Equipment		8
4-6 Reporting Spills		8
4-7 Reporting of Heat-Related Incidents		8
4-8 Decontamination		9
4-9 Labeled Equipment		9
4-10 Testing		9
4-11 PCB Ballasts		9
4-12 Identifying PCB Ballasts		9

CHAPTER 5

INSPECTION REQUIREMENTS

5-1 Transformer Inspection	9
5-2 Temporary Transformer Storage Building	10
5-3 Inspection Reporting and Deficiency Correction	10
5-4 Deficiency Correction	10
5-5 Annual Inspection	10
5-6 Annual Document Log	10

CHAPTER 6

USE REQUIREMENTS (FOR PCB EQUIPMENT IN SERVICE)

6-1 Storage of Combustibles Prohibited	10
6-2 Marking Access Points and Vaults	10
6-3 Reporting of Releases	11

CHAPTER 7

LABELLING

7-1 PCB or PCB Contaminated Label	11
7-2 Non-PCB Label	11
7-3 Unlabeled Equipment	11
7-4 Label Removal Prohibited	11

CHAPTER 8

DISPOSAL REQUIREMENTS

8-1 Legal Responsibility	11
8-2 Coordination with DRMO	12
8-3 Proper Disposal of Spill Debris	12
8-4 Storage Time Limitation	12
8-5 Unauthorized Releases Prohibited	12

CHAPTER 9

SAFETY AND HEALTH REQUIREMENTS

9-1 Respirator Protection	12
9-2 Environmental Monitoring	12
9-3 Personal Protective Equipment and Clothing	12
9-4 Sanitation Practices	12
9-5 Medical	12

CHAPTER 10

PCB TRAINING AND EDUCATION REQUIREMENTS

10-1 Safe Working Practice Training	13
10-2 Training Requirements	13
10-3 Hazardous PCB Exposure Information	13
10-4 Records of Employee Training	13

CHAPTER 11

DEFINITIONS	13
-----------------------	----

FIGURES

Transformer Data Sheet	1-1
PCB Equipment and Transformer Quarterly	2-1
Weekly Inspection Form	3-1
Transport Vehicle Marking	4-1
PCB Label	5-1
PCB Contaminated Label	6-1
Non PCB Label	7-1
Hazardous Waste Label	8-1

TABLES

Respiratory Protection Guidelines	Table 1
---	---------

APPENDIX

List of Transformers on Fort Devens	Appendix A
---	------------

CHAPTER 1

GENERAL

1-1 Purpose. To provide guidance and assistance to Fort Devens activities in the safe handling, storage, and disposal of Polychlorinated Biphenyls (PCBs). This regulation provides a summary of existing regulations and gives guidance for implementation of these requirements and assessing compliance.

1-2 Responsibilities.

a. All Fort Devens staff elements, tenants, and reserve components are responsible for ensuring compliance with published policies and procedures.

b. Environmental Management Office (EMO) will:

(1) Appoint a PCB Coordinator who will be responsible for the PCB Program coordination and implementation.

(2) Advise staff elements, tenants and reserve components of proper procedures for the use, storage and disposal of PCB items.

(3) Monitor activities using PCBs and coordinate handling PCB items.

(4) Prepare and maintain all annual reports required by the Environmental Protection Agency (EPA) and the Commonwealth of Massachusetts involving PCB activities.

(5) Operate an EPA permitted Hazardous Waste Storage Facility, building 1650, to properly store PCB items, containers and PCB liquids as required.

(6) Coordinate all PCB training for EMO personnel and maintain a log of all PCB training received by personnel in the area of responsibility.

(7) Contact the transporter and/or the owner or operator of the designated PCB commercial storage or disposal facility to determine the status of the PCB waste when the EMO does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter. All correspondence, telephone calls will be documented in the PCB Annual Document.

(8) Assure that all EMO personnel handling PCBs on a routine basis participate in PCB monitoring through Preventive Medicine's Medical Monitoring Program.

c. Directorate of Engineering and Housing (DEH) will:

(1) Coordinate with the EMO on any activity involving the handling, transportation, storage or change in status of PCB equipment.

(2) Complete required documentation (Transformer Data Sheets, Figure 1-1) when changing the status of PCB equipment in any way and will assist the EMO in sampling equipment in service to determine PCB status.

(3) Perform all operations involving PCB equipment, PCB liquids, or PCB contaminated equipment in a safe and responsible manner, taking particular precaution to prevent spills, leaks, drips or any release of PCBs into the environment.

(4) Maintain a PCB Log of all PCB items on post, including documentation for any PCB items moved, placed in storage or disposed. This information will be provided to the Fort Devens Fire Department, Safety Management Office and Preventative Medicine Offices.

(5) Provide and require the use of PCB impervious protective gloves to linemen working on PCB or PCB contaminated equipment and follow other protective equipment requirements, as directed, in accordance with the specific situations and exposure levels encountered.

(6) Maintain the PCB Temporary Transformer Storage Area, building 1484, according to the requirements outlined in Chapter 3, Storage Requirements.

(7) Inspect PCB Transformers and the DEH Temporary Transformer Storage Facility as outlined Chapter 5, Inspection Requirements, including quarterly inspection of PCB transformers (See Figure 2-1) and weekly inspection of the Temporary Transformer Storage Facility (See Figure 3-1).

(8) Maintain a PCB Spill Prevention, Control and Countermeasure Plan (SPCC Plan) as required by 40 CFR 112, and provide emergency coordination as directed by the SPCC plan.

(9) Provide training to all persons handling PCB equipment in:

(a) Proper and safe handling methods for PCB items

(b) Proper protective equipment

(c) Spill prevention, control and countermeasure (SPCC) procedures as outlined in the SPCC plans

(d) Inspection techniques for use when inspecting transformers.

(10) Ensure that employees routinely handling PCB items are enrolled in the PCB background level testing program provided by Preventive Medicine and the Medical Monitoring Program through the Preventive Medicine and Safety Office.

(11) Ensure no equipment containing PCBs is installed or added to Fort Devens.

(12) Remove from service, immediately, any transformer, or other electrical equipment, found to be leaking PCBs and replace the transformer with a transformer free of PCBs.

(13) Take into consideration the possibility of PCB density during any design work involving the movement, replacement, or altering the status of any electrical transformers, substations, ballast replacement, or capacitor banks. Such work will be coordinated with the EMO to identify PCB items and ensure proper and safe handling.

(14) Notify the EMO of any contracts involving PCBs and transformers and include language in the contract requiring that the Contractor comply with this regulation and EMO guidance on manifesting.

(15) Ensure that all disposal of PCB items will be done through the EMO in coordination with Defense Reutilization Marketing Office (DRMO). Local contracts will not be used to dispose of PCB items, other than strictly in accordance with paragraph 6-4f, AR 200-1.

d. Defense Reutilization Marketing Office (DRMO) will:

(1) Ensure that marketing, disposal, and scrap operations are conducted to prevent PCBs from being released into the environment and operations are in compliance with 40 CFR 761, Polychlorinated Biphenyl Regulations and all other applicable regulations.

(2) Ensure that all electrical and electronic equipment turned in as an item have all PCB components identified on the turn-in document and laboratory analysis attached documenting the PCB concentrations.

(3) Ensure that all items and equipment, including electrical or electronic equipment that is turned into the DRMO as scrap have all PCB items, including small capacitors and ballasts, removed by the activity prior to turn in.

(4) Ensure that all items containing PCBs which are no longer usable for their manufactured and intended purpose are treated as hazardous waste and are not transported onto Fort Devens without special approval of the EMO.

(5) Ensure that all equipment or items containing PCBs, or having been tested and determined to be PCB free are labelled with the appropriate PCB, either PCB contaminated label or PCB free label prior to storage.

(6) Ensure that sealed, oil filled capacitors, electronic or electrical equipment which cannot be tested but contain free oil will be handled as PCB, unless documentation is provided from the manufacturer which guarantees that the material does not contain PCBs. (Reference: DRMO Devens Customer Assistance Guide for turn in of hazardous property).

(7) Ensure that oil filled equipment, whether PCB equipment or not, will not be thrown, tossed or otherwise handled roughly and that all items containing free liquid shall be identified and handled accordingly.

(8) Ensure that PCB items or equipment is stored in a segregated area where no piling, crushing, shredding, or scrap disposal is done.

(9) Ensure that PCB items which become scrap either have all PCB capacitors or PCB items removed or are sold whole and intact to a knowledgeable buyer.

(10) Report any actual or potential release of PCB to the Fire Department.

e. Directorate of Logistics (DOL) will:

(1) Examine all electrical and electronic equipment for PCB capacitors and ballasts that require classification prior to turn in to DRMO.

(2) Have their Material and Maintenance Division remove all PCB capacitors and ballasts and handle them as Hazardous Waste.

1-3 References. All the following referenced publications are available for review at the Installation Environmental Management Office, building 689, Fort Devens, MA.

- a. AR 200-1, Environmental Protection and Enhancement, para 5-6
- b. USAEHA Technical Guide TG-136, Apr 84, Hazardous Waste Management, Appendix H
- c. Code of Federal Regulations, EPA, Toxic Substances Control Act (TSCA), 40 CFR 761 - Polychlorinated Biphenyls, 7/1/91 as amended
- d. Code of Federal Regulations, EPA, Resource Recovery & Conservation Act (RCRA), 40 CFR 260, 7/1/91 as amended
- e. Commonwealth of Massachusetts Regulations, 310 CMR 30.00 and GL 21.C
- f. Massachusetts Part B Hazardous Waste TSDF permit MA7210025154, Fort Devens, MA
- g. PCB Spill Prevention Control & Countermeasure Plan (SPCC), Fort Devens, MA. 1983 as revised 1989 (draft)
- h. Code of Federal Regulations, U.S. Department of Labor Occupational Safety and Health Administration, 29 CFR 1910 OSHA 2206 rev. 1983
- i. Toxic Substances Control Act (TSCA), 15 USC sections 2601-2629.

CHAPTER 2

BACKGROUND

2-1 Polychlorinated Biphenyls (PCBs). A group of toxic chemicals belonging to the chlorinated hydrocarbon family. In the past, many chemicals belonging to this family, such as DDT, chlordane, dieldrin, and dioxin have received notoriety due to known environmental and health problems. The physical and chemical properties of PCBs include high capacity for heat, low flammability, high stability, low vapor pressure, and low electrical conductivity. PCBs have been used extensively as insulators and

coolants in electrical equipment, especially in electrical transformers in and around buildings where the danger of fire exists. PCBs have also been used in capacitors, fluorescent light ballasts, electrical appliances, and motors. To a lesser extent, they have been used in paints, adhesives, caulking compounds, plasticizers, lubricants, hydraulic and heat transfer systems, carbonless copy paper, sealants, coatings, and dust control agents.

2-2 Toxic Substance Control Act (TSCA). Congress passed the Toxic Substance Control Act (TSCA PL 94-469) in 1976 and specifically directed the Environmental Protection Agency (EPA) to develop regulations regarding the manufacture, processing, distribution in commerce, use and disposal of PCBs. Congress took this action because it believed that the chemical and toxicological properties of PCB were such that their continued manufacture and use would pose significant risk to public health and the environment. The TSCA regulations authorized certain uses of PCBs provided the uses comply with proper procedures and operational conditions.

2-3 Health Issues. EPA concern was based on investigations during the 1970's that identified potential health problems resulting from exposure to PCBs. PCBs can cause irritation to the eyes, skin and lungs from contact and it has been suspected that PCBs may cause cancer. To date there is still not enough evidence to prove PCB causes cancer in humans. However, because PCBs are very stable and very slow to break down (degrade), PCBs accumulate in human fat tissue. Based on the possible health effects and the knowledge that PCBs were already accumulating in humans, EPA developed the TSCA PCB regulations (40 CFR 761) prohibiting the manufacturing, distribution and use of PCBs except in a totally enclosed manner. When high concentration PCBs are incompletely burned, they generate other toxic chemicals, polychlorinated dibenzofurans (PCDF) and polychlorinated dibenzodioxins (PCDD). The toxic degree of PCDFs are unknown. PCDDs are considered extremely toxic. Because of this experience, EPA has issued more stringent regulations aimed at avoiding heat related incidents and providing for extensive reporting of such incidents to the EPA.

2-4 Cost of Clean-up: Cleanup from heat-related incidents averages from 25 to 40 million dollars per incident. Very small "incidents" involving small quantities of PCB can cost millions to clean up, for example, 3 lbs. of PCB released during a fire in Connecticut cost 3.5 million dollars to clean up. Several Department of Defense (DOD) incidents have cost over 25 million dollars each to clean up. Besides the high cost of clean-up costs, buildings have had to be vacated for years for the clean up to take place. Virtually all "personal" equipment - desks, chairs, computers, etc. had to be destroyed because of contamination.

CHAPTER 3

STORAGE

3-1 Labeling Procedures

a. All PCB items placed in storage shall be labeled by the using activity with weatherproof labels, clearly written in indelible ink. These labels will be attached to each item in storage in accordance with TSCA and Massachusetts Department of Environmental Protection (MADEP) requirements, and include the following information:

- (1) PCB Status (PCB or PCB contaminated) Note the concentration if known.
- (2) Date removed from service

b. If the equipment is stored for disposal, then a MADEP Hazardous Waste Label must also be applied, with the following information:

- (1) The words "Hazardous Waste"
- (2) The name of the hazardous substance (i.e. "PCB Dielectric Fluid")
- (3) The associated hazard, (i.e. "Toxic")
- (4) The date removed from service

3-2 Designated Storage Areas:

a. No outside storage of PCB items shall be permitted.

b. All PCB items not in acceptable use must be stored in the Hazardous Waste Storage Facility, building 1650 or the DEH Temporary Transformer Storage Facility, building 1484 as specified below:

(1) Non-leaking PCB articles and PCB equipment will be stored in building 1484, provided that the integrity of the casing is intact and that no PCB can escape through bushings, holes or seeping seams on the case. The equipment must be labeled and inspected as outlined in this regulation.

(2) Containerized, leaking PCB articles and PCB equipment, will be stored in building 1484, provided that all fluids are previously drained and properly disposed of as hazardous waste, or that the PCB items are placed in a non-leaking PCB container that contains sufficient absorbent materials to absorb any liquid PCBs remaining in the item and is labelled and inspected as required by this regulation.

(3) All other PCB items, not specifically mentioned above, will be stored in building 1650.

c. No temporary storage of liquid PCBs outside building 1650 or building 1484 is allowed.

3-3 Storage Time Limitations.

a. PCB items held for disposal in building 1484 will not be held more than 90 days before being transported to building 1650 or to a permitted Temporary Storage Disposal Facility (TSDF) located off post. PCB items will be turned in to DRMO for disposal within seven days of generation.

b. All PCB items must be disposed of before one year from the date removed from service. No PCB items will be held in storage for disposal in building 1650 longer than nine months. Items will be turned in, as generated, to the DRMO on DD Form 1348-1, DOD Single Item Release/Receipt Document, within seven days of receipt by the EMO.

Note: The term "Disposed of before 1 year" includes the time to transport to a hazardous waste treatment facility.

3-4 Specifications for PCB Storage Buildings

a. Buildings 1484 and 1650 conform to the requirements for PCB storage. Construction or purchase of buildings for the purpose of storage of PCBs should be coordinated with the EMO and meet the following specification:

(1) Spill Containment: A containment area surrounded by a berm, six inches high and capable of containing 200% of the largest container or 25% of the total permitted volume, whichever is greater.

(2) Weather Protection: A roof, walls and doors to restrict entry and to provide weather protection.

(3) Impervious Floor: An impervious floor covering so that PCBs spilled will not penetrate the floor (i.e. epoxy coating). No floor drains, cracks or expansion joints will be permitted.

(4) Security: The building will be secured when not in active use, unauthorized personnel will not be allowed unescorted access.

(5) PCB Markings and Hazardous Waste Markings: The building will be marked as a PCB storage area and as a hazardous waste accumulation area or hazardous waste storage facility.

(6) Location: Not located a a site that is below the 100 year flood water elevation.

CHAPTER 4

HANDLING AND TRANSPORTATION

4-1 On-Post Transportation Requirements. PCB items being removed or transferred will be delivered to the facility (buildings 1650 or 1484) only after coordination with the EMO, 796-3002 and in strict accordance with the procedures specified by the EMO, in conjunction with Preventive Medicine and Safety.

4-2 Reporting PCB Equipment Status Changes. The EMO will be advised of any movement of PCB or PCB contaminated equipment. Specific instructions will be given in cases of leaking equipment or PCB (over 500 ppm) equipment which may have overheated.

4-3 Transformer Data Sheets. All PCB transformers placed into or removed from service must be placed into proper storage and be documented with appropriate form (See Figure 1-1), a copy shall be furnished to the EMO. These requirements will be the responsibility of the activity directing the action (i.e. DEH, Engineer Plans and Services, Estimators, Electric Shop, Corps of Engineers, etc.)

4-4 Transport Vehicle Marking. Any vehicle transporting more than 45 kg. (99.4 lbs) of liquid PCB or one or more PCB transformers must be marked in accordance with 40 CFR 761.40(b). The DEH Electric Shop has been provided the proper M_2 placards for each side and the front and rear of the vehicle (See Figure 4-1).

4-5 Safety of Workers Handling PCB Equipment. Every precaution will be taken during the handling and removal of PCB or PCB contaminated equipment to ensure the safety of workers and to prevent any release of PCBs into the environment as outlined in Chapter 9, Safety and Health Requirements. Measures to be taken include, but are not limited to:

- a. The use of protective equipment outlined in this regulation.
- b. Tightening bushings or closing openings in a carcass to prevent fluid from escaping.
- c. Wrapping the transformer in plastic during handling operations.
- d. Placing plastic on all ground areas to prevent any spilled fluid from getting on the ground.
- e. If the equipment is visibly leaking, additional measures will be specified to prevent any possible release of PCBs into the environment.

4-6 Reporting Spills. All spills of PCBs will be reported immediately to the DEH Fire Department, 796-2117 and the EMO, 796-3002. In the event that the EMO can not be contacted, the generator shall notify the following agencies:

- a. National Response Center, U.S. Coast Guard Duty Office, Washington, DC. 1-800-424-8802 (24 Hrs per day)
- b. EPA, Oil and Hazardous Material Section, Regional Response Center, Lexington, MA 1-617-223-8265 (24 hrs per day)
- c. Massachusetts Department of Environmental Protection 1-508-792-7653.
- d. After working hours of the Massachusetts Department of Environmental Protection, call the Massachusetts State Police 1-508-537-2188.
- e. In the event of a spill, clean-up efforts shall be initiated within 24 hours following the guidance of the PCB Spill Prevention, Control and Countermeasure Plan (SPCC Plan).

4-7 Reporting of Heat-Related Incidents. If it appears that the piece of PCB (over 500 ppm) equipment has overheated or otherwise been involved in a heat-related incident or fire, then all work will cease, the Fire Department and the EMO will be notified immediately, and work continue only after the situation has been surveyed and appropriate measures prescribed.

4-8 Decontamination. No material or equipment which comes in contact with liquid PCBs, including tools, equipment or clean-up materials, will be removed from the site or storage facility, or used, removed, or disposed of, without thorough decontamination and consultation with the EMO. The decontamination of the item(s) in contact with PCBs shall be done by qualified personnel experienced with PCB decontamination.

4-9 Unlabeled Equipment. All equipment which contains oil dielectric, and is not otherwise labelled, shall be assumed to be PCB contaminated and handled accordingly. Where unlabeled equipment is removed from service, an oil sample shall be taken by the EMO for testing and determination of PCB content.

4-10 Testing. The testing of electrical devices taken out of service shall be accomplished by the EMO. All data related to PCBs shall be kept on file by the EMO.

4-11 PCB Ballasts. While there is only a small amount of PCBs in each light ballast, there is a huge number of ballasts in the United States which aggregate to a large quantity of PCBs in buildings. Consider the following facts:

- a. Installed base of ballasts in the United States is between 400 million and 1.6 billion ballasts.
- b. Approximately half were manufactured prior to 1979 and contain PCBs.
- c. Each ballast contains one ounce of virtually pure PCBs.
- d. Total quantity of PCBs in buildings in the United States: 10 million to 40 million pounds of PCBs.

4-12 Identifying PCB Ballasts. Most ballasts manufactured prior to 1979 contain PCBs. All PCB ballasts manufactured after 1 July 1978 that do not contain PCBs are required to be clearly marked "NO PCB". Since most ballasts also contain a date stamp in the metal base plate, it is recommended that the "NO PCB" label and date stamp be checked to ensure that the ballast was made after 1979 before classifying the ballast as a non-PCB ballast. All unmarked ballasts or ballasts without a date code shall be classified as PCB ballasts. The following is information on individual ballast manufacturers' date codes and when they stopped manufacturing PCB ballasts.

- a. Advance Transformer, stopped using PCBs in 1978/79. Ballasts stamped with a date earlier than 1978 should be assumed to contain PCBs. Ballasts which do not contain PCBs will state on the label "NO PCB".
- b. General Electric, (sold its' ballast business to Valmont Electric in the early 1980's). Used in high power factor (HDF) ballasts made between 1953-1979. Date of manufacture is stamped on ballast using a letter date code. Changed from PCB to non-PCB during 1977-1978. HDF ballasts made during 1977-1978 which do not contain PCBs will have "W" added after the catalog number. All ballasts made after 1979 will state "NO PCB" ON label.
- c. Jefferson Electric, (now owned by MagneTek, Inc.), stopped using PCBs during 1977-1979. Non-PCB ballast made during 1977-1979 will be marked with a green dot and possibly marked "NO PCB" on label. Ballasts stamped with a date prior to 1977 contain PCBs. Ballasts made after 1979 will be marked "NO PCB" on label.
- d. Universal, (now owned by MagneTek, Inc.), ballasts made prior to January, 1979 contain PCBs. Ballasts made starting January, 1978 will state "NO PCB" on label.

CHAPTER 5

INSPECTION AND RECORDKEEPING REQUIREMENTS

5-1 Transformer Inspection: PCB Transformers (over 500 ppm) will be inspected quarterly by DEH with inspections being at least 30 days apart. This inspection form (see Figure 2-1) shall be submitted to the EMO by the 15th of March, June, September, and December. The following items will be examined:

- a. Signs of dampness visible on the outside of the transformer which would indicate release of PCBs, as well as, obvious leaks or drips from valves or fittings.
- b. Signs of low oil level, high temperature, overloading or other operational problems which would indicate impending problems.
- c. Signs of a heat related incident, obvious overheating, soot stains, etc.
- d. Signs of faulty electrical connection.
- e. Labelling both on the transformer itself and proper labelling at every access to a transformer vault or fenced substation.
- f. Integrity of spill containment basins.
- g. Housekeeping, no combustible material shall be stored within a PCB Transformer vault or within 15 feet of a PCB transformer in an open cage or accessible area.

5-2 Temporary Transformer Storage Building. A log of inspections shall be kept by the DEH for at least three years after each inspection or until final closure of facility whichever is greater. The building shall be inspected weekly by DEH. A copy of the inspection form (see Figure 3-1) shall be submitted to the EMO each week. All items on inspection form will be examined for each PCB article in the building. In addition, the following shall be examined:

- a. No combustibles stored within the building.
- b. Integrity of floor no cracks, expansion joints or drains which would allow PCB to be released
- c. Proper labelling
- d. Access restricted to authorized personnel at all times.
- e. Proper containerizing of leaking equipment.
- f. Availability of spill cleanup equipment as outlined in the PCB SPCC Plan
- g. That all PCB articles are labelled as to PCB status, date removed from service, and if unserviceable or in storage for disposal, the words "HAZARDOUS WASTE" on each piece of equipment.
- h. List each PCB article in storage over 30 days.

5-3 Inspection Reporting and Deficiency Correction: All results of inspection, including description of problems found, shall be detailed on the inspection form (see Figure 3-1). Where no problems were found, the inspector shall so certify directly on the form.

5-4 Deficiency Correction. Any deficiencies found shall be promptly corrected. Where corrective action is needed, such actions shall be promptly initiated by DEH. Copies of the inspection forms, if deficiencies are noted, shall be submitted to the EMO within 24 hours after completion of inspection. The DEH shall follow the Internal Controls procedure to complete the Materials Weakness Form.

5-5 Annual Inspection. An annual inspection shall be done by the EMO prior to preparation of the PCB Annual Document Log.

5-6 Annual Document Log. The EMO shall prepare and maintain on record the PCB Annual Document Log. This written annual document log must be prepared by July 1st covering the previous calendar year (January through December). The log shall be maintained for at least three years after the Installations ceases using or storing PCBs and PCB

items. The log represents the Installations's PCB activity for the previous calendar year and consists of manifests, certificates of disposal, an inventory of PCB items and articles disposed of and remaining in service at the end of the calendar year, as well as, any other correspondence with a commercial storer concerning PCB waste. The annual document log shall be available for inspection by authorized representatives of the EPA.

CHAPTER 6

USE REQUIREMENTS (FOR PCB EQUIPMENT IN SERVICE)

6-1 Storage of Combustibles prohibited. No combustible materials shall be stored within 15 feet of any PCB transformer.

6-2 Marking Access Points and Vaults. Structures containing PCB equipment or a transformer enclosure or partitioned area containing a transformer will be clearly labelled (using Mark M₁) at each point of access. (See Chapter 3)

6-3 Reporting of Releases. All spills, leaks, or other releases of PCBs will be reported immediately to, first, the DEH Fire Department (x796-2117) and then to the EMO (x796-3002). In the event that the EMO cannot be contacted, the generator shall notify the following agencies:

a. National Response Center, U.S. Coast Guard Duty Office, Washington, D.C. 1-800-424-8802 (24 hrs per day)

b. EPA, Oil and Hazardous Material Section, Regional Response Center, Lexington, MA 1-617-223-7265 (24 hrs per day)

c. After working hours of the Massachusetts Department of Environmental Protection call the Massachusetts State Police. 1-508-537-2188.

CHAPTER 7

LABELLING

7-1 PCB OR PCB Contaminated Label. All PCB transformers shall be labelled with an approved label ("M₁") on the face of the transformer and at every access point to any transformer vault or substation (see figure 5-1). PCB contaminated transformers shall be labelled with a "PCB Contaminated" label (see figure 6-1). The actual concentration of PCB fluid in the equipment shall be shown when known. PCB and PCB Contaminated labels can be obtained from the EMO, building 689.

7-2 Non-PCB Label. All non-PCB transformers and capacitors (less than 50 ppm PCB) shall be labelled with an approved "Non PCB" label (blue label), the date of testing and the resulting concentration (see Appendix G). The letters NDL shall indicate "Not detectable level".

7-3 Unlabeled Equipment. Federal Regulations state that unless a transformer has information on the name plate or a chemical analysis which indicates the dielectric fluid is not a PCB, then the transformer must be considered a PCB transformer and labelled and handled as such. The rule further states that all "oil filled" transformers must be considered "PCB contaminated" until proven otherwise through testing.

7-4 Label Removal Prohibited. No PCB, PCB Contaminated, or Non PCB labels will be removed from electrical equipment under any circumstances without the express agreement of the EMO.

CHAPTER 8

DISPOSAL REQUIREMENTS

8-1 Legal Responsibility. The legal responsibility for the proper disposal of PCB items rests with the Installation Commander, and is administered by the EMO. No PCB items will be disposed of, i. e. sold, removed, buried or otherwise destroyed without prior consultation with the EMO.

8-2 Coordination with DRMO. Disposal of all PCB items will be through the DRMO via DD Form 1348-1 and Defense Reutilization Management Service (DRMS) guidance.

8-3 Proper Disposal of Spill Debris. Disposal of spill debris and clean-up material will be by licensed transporter and disposal facilities or through DRMS at the discretion of the Spill Response Coordinator.

8-4 Storage Time Limitation. In no case shall PCB items, PCB liquids, or PCB spill debris be kept in storage for disposal greater than nine months from the date of accumulation or from the date removed from service.

8-5 Unauthorized Releases Prohibited. Any release of PCB fluid into the environment (spills, leaks, etc.) constitute unauthorized disposal, and may generate sanctions if not handled in accordance with 40 CFR 761.

CHAPTER 9

SAFETY AND HEALTH REQUIREMENTS

9-1 Respirator Protection. The U.S. Department of Health and Human Services, National Institute of Occupational Safety and Health (NIOSH) recommendations to minimize exposure to PCBs include keeping the airborne concentration no higher than one ug/M³, on a time-weighted average basis. This level is normally met by ventilation of closed spaces containing PCB equipment. In order to meet the respiratory protection requirements for varied conditions of exposure to PCBs, Table 1 prescribes guidelines for use. Evaluation must be made based upon conditions encountered with each potential exposure to PCBs.

9-2 Environmental Monitoring. Monitoring the concentration of PCB vapors must be performed during spill cleanup for two reasons. It will indicate when the cleanup personnel can safely remove their respirators, and will indicate when the area is safe for entry by unprotected personnel. The Industrial Hygienist (796-2460) has expertise in air monitoring for PCB concentration with the MSA Model G pump.

9-3 Personal Protective Equipment and Clothing. Protective equipment and clothing use must be evaluated for each incident. Eye protection and gloves will always be necessary. Contact lenses cannot be worn when working around PCBs. Coveralls (or aprons) and boots will be required when it is likely that other parts of the skin will come in contact with PCBs or PCB contaminated material. Since no material is impervious, contact EMO (796-3002) or Industrial Hygiene (796-2460) for guidance on how long any given material can be expected to provide adequate protection. Clothing contaminated with PCBs must be stored in plastic bags and disposed of in approved containers.

9-4 Sanitation Practices. Shower facilities shall be available to all personnel exposed to PCBs and shall be used by all personnel working with PCBs before changing to street clothing. Employees must wash their hands before eating, drinking, smoking, or using toilet facilities during work with PCBs. Food, drink, and smoking materials shall not be allowed in areas where PCBs are handled or in PCB spill areas.

9-5 Medical. Preventive Medicine has set up a medical program for personnel who may be expected to come in contact with PCBs. The medical program is designed to periodically examine potentially exposed personnel to make sure that their working with or around PCBs is not affecting their health. Details of the medical surveillance program may be obtained for Preventive Medicine. Included are:

- a. All Electric Shop Linemen
- b. All Environmental Management Hazardous Waste personnel
- c. All female workers of child-bearing age must be advised of the possibility that exposure to PCBs could, potentially, adversely affect an unborn child. Those who bear children while working with or around PCBs must be counselled about the possibility that there could be PCBs in their milk, and the effect that could have on their children if they nurse.

CHAPTER 10**PCB TRAINING AND EDUCATION REQUIREMENTS**

10-1 Safe Working Practice Training is the key to reducing and/or eliminating exposure to PCBs. Therefore, each activity shall initiate an educational program which will ensure that all employees occupationally exposed to PCBs have knowledge of job hazards, proper maintenance and cleanup methods, and proper use of protective clothing and equipment. Annual review sessions are required. Respirator training and fit testing is conducted by the Fort Devens Safety Office on an annual basis. Additional information and assistance is available from the EMO (796-3002).

10-2 Training Requirements. Training must include, as a minimum:

a. Proper use of protective clothing and equipment whenever the potential for exposure to PCBs may exist. This should include the fact that PCBs will penetrate protective clothing if they are in contact with it for a long enough period.

b. Use, fitting, care and maintenance of respirators. Location of self-contained breathing apparatus (SCBA) if maintained by other users.

c. General description of the medical surveillance program and its advantages for the employees.

d. Inform all present and new employees working with PCBs of the hazards, relevant symptoms and effects of overexposure to PCBs and precautions to be observed for safe use and handling of these materials.

e. Make female employees aware of the potential adverse effects of PCBs on the unborn child and of the known transport of PCBs to the breast milk.

f. Emergency procedures; periodic drills to be conducted.

g. Decontamination procedures for site and equipment.

h. First aid procedures, equipment location and use.

i. Sanitation procedures.

10-3 Hazardous of PCB Exposure Information should be kept on file and available to employees. Appropriate warning signs and labels must be affixed whenever required and informational posters shall be posted in the workplace.

10-4 Records of Employee Training in the safe handling of PCBs will be maintained by the EMO and in the employee's personnel file.

CHAPTER 11**DEFINITIONS**

11-1 Capacitor - Any device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric (insulating) fluid or materials.

Types of Capacitors:

Small capacitor: A capacitor which contains less than 1.36 kg (3 lbs.) of dielectric fluid.

Large high voltage capacitor: A capacitor which contains 1.36 kg or more dielectric fluid and which operates at 2000 volts or more (AC or DC).

Large low voltage capacitor: A capacitor which contains 1.36 kg or more dielectric fluid and which operates at less than 2000 volts (AC or DC).

11-2 PCB and PCBs - Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains each substance.

11-3 PCB Article - Any manufactured article, other than a PCB container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. "PCB article" includes capacitors, transformers, electric motors, pumps, pipes and any other manufactured item which contains PCBs.

11-4 PCB Contaminated Electrical Equipment - Any electrical equipment, including but not limited to transformers, capacitors, circuit breakers, reclosers, voltage regulators, switches, electromagnets, and cable, that contain 50 ppm or greater PCB, but less than 500 ppm PCB.

11-5 PCB Item - Any PCB article, PCB article container, PCB container, or PCB equipment that contains any PCBs.

11-6 PCB Transformer - Any transformer that contains 500 ppm (parts per million) PCBs or greater.

ADDITIONAL AND MORE DETAILED DEFINITIONS MAY BE FOUND IN 40 CFR 761. (AVAILABLE IN THE EMO OFFICE AT BUILDING 689)

TRANSFORMER DATA SHEET

1. SERIAL NUMBER: _____
2. MANUFACTURER: _____
3. ACTION: Removal _____ Installation _____
4. TRANSFORMER NUMBER _____
5. MOUNTING: Pole _____ Pad _____ Indoor _____ Outdoor _____
6. LOCATION: Pole Number _____ Near _____
7. INSTALLATION: Devens _____ Other _____
8. SIZE: _____ KVA 9. PCB CONCENTRATION: _____ PPM
10. PHASE: Single _____ Three _____ One of Bank of Three _____
11. REASON: Leaker _____ Replace Leaker _____ Upgrade _____
12. OIL TYPE: Dry _____ Mineral _____ Askarel _____ Unknown _____
Other _____
13. WEIGHT: _____ Pounds _____ Nameplate _____ Calculated _____
14. VOLUME: _____ Gallons _____ Nameplate _____ Calculated _____
15. DESTINATION: Building 1484 _____ Building 1650 _____
(If removal) Other _____
16. ADDITIONAL INFORMATION: _____

SIGNATURE: _____

DATE: _____

PCB EQUIPMENT AND TRANSFORMER QUARTERLY INSPECTION FORM
(Complete one sheet for each location)

DATE OF INSPECTION _____ QUARTER ENDING: MAR JUN SEP DEC

LOCATION _____

INSPECTOR _____ TITLE/OFFICE _____

	<u>Test#</u>	<u>Serial Number</u>	<u>Manufacturer</u>	<u>Size</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

CERTIFICATION (Sign one block only)

SATISFACTORY: I certify that the PCB Equipment listed above was inspected on this date for the following items. No deficiencies or unsafe conditions were found.

Signed: _____

UNSATISFACTORY: I certify that the PCB Equipment listed above was inspected on this date for the following items. Deficiencies and/or unsafe conditions were found and noted.

Signed: _____

INSPECTION

1. Is the entrance properly labelled? Yes No N/A
2. Is the area spill protected? Yes No N/A
3. Is the area in good condition? Yes No N/A
4. Any signs of leaks, spills, seepage? Yes No N/A
Serial No./Descr. of leaker _____
5. Are electrical connections in good condition? Yes No N/A
6. Is oil level adequate? Yes No N/A
7. Maximum temperature shown: _____ Actual temperature _____
8. Are all PCB transformers properly labelled? Yes No
9. Are all PCB transformers currently in service? Yes No
10. Are there signs of overheating (soot, smoke damage) Yes No
11. Is the area secure? (locked, access limited to authorized personnel) Yes No
12. Is any combustible material stored within the vault or stored within 5 meters (16') of and PCB equipment? Yes No
13. Are there other conditions needing correction which may contribute to a fire or spill situation? Yes No
- DESCRIBE ALL UNSATISFACTORY CONDITIONS DISCOVERED ON REVERSE

PCB TRANSFORMER STORAGE BUILDING WEEKLY INSPECTION FORM

DATE: _____ TIME: _____

Name of Inspector: _____ Title: _____

INSPECTION ITEMS:

1. List all PCB or PCB contaminated items in building:

<u>Manufacturer</u>	<u>Serial #</u>	<u>Date Removed</u>	<u>Leaking</u>

2. PCB Labelling: On building entrance: _____ On PCB items _____
3. HAZARDOUS WASTE Labelling: On building _____ On PCB items _____
(Labels must show date removed from service & level of PCB Contamination)
4. PCB Spill Kit present & sealed? In building _____ In Truck _____ (If seal broken, verify against PCB SOP requirements & seal)
5. Are there any combustibles stored within the storage building? _____
6. Is building secured when not actively occupied? _____ Is access restricted to authorized personnel at all times? _____
7. Are leaking PCB items properly containerized? _____
8. Is all PCB equipment stored inside building? _____
9. Are there cracks in the flooring and containment system that would allow PCBs to be released? _____
10. Are containers that store PCB items leaking? _____ Do they show any signs of deterioration or corrosion? _____
11. List below each PCB article in storage over 60 days. Notify the EMO in writing for each PCB article in storage over 60 days.
- _____
- _____
- _____

12. DESCRIBE BELOW ALL UNSATISFACTORY CONDITIONS FROM ABOVE AND THE ACTIONS TAKEN TO CORRECT THE UNSATISFACTORY CONDITIONS.

13. LIST BELOW THE DATE AND NATURE OF ANY REPAIRS TO THE STORAGE BUILDING THAT CORRECTED ANY PREVIOUSLY NOTED DEFICIENCY. LIST THE DATE THAT THE DEFICIENCY WAS FIRST ANNOTATED.

CERTIFICATION: I certify that the PCB Transformer Storage Building was inspected on the above date for the above items. No deficiencies or unsafe conditions were found.

Signed: _____

UNSATISFACTORY: I certify that the PCB Transformer Storage Building was inspected on the above date for the above items. The above items were inspected, and deficiencies found and noted above.

Signed: _____

Transport Vehicle Marking--M_L
Used to designate that PCB
equipment is being transported

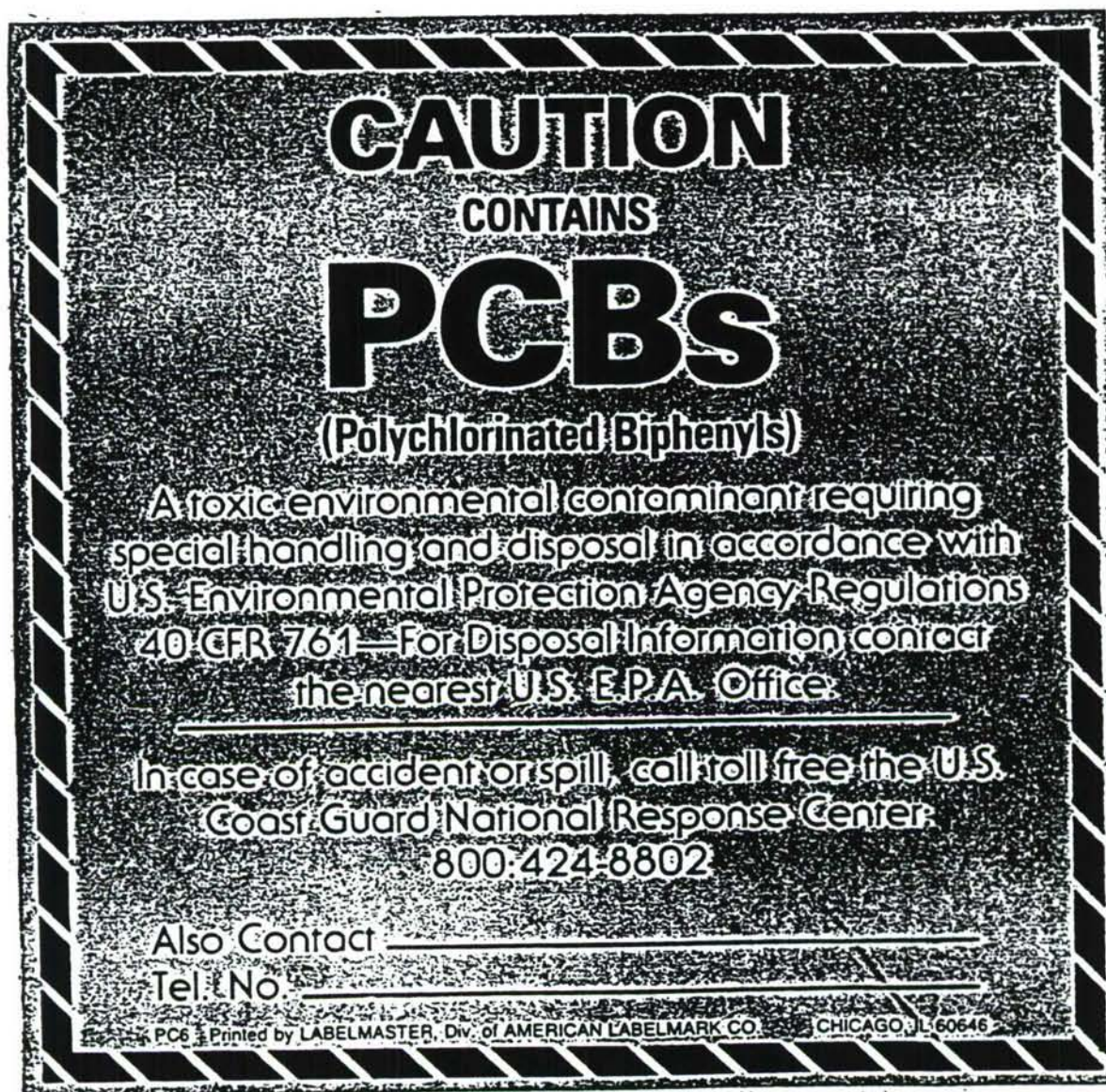


Figure 4-1
TRANSPORT VEHICLE MARKINGS

Types of M_L labels -- PCB Label
Used to designate equipment
over 500 ppm.

Show PCB concentration on label, if known

Same mark used on Vault entrances with PCBs.

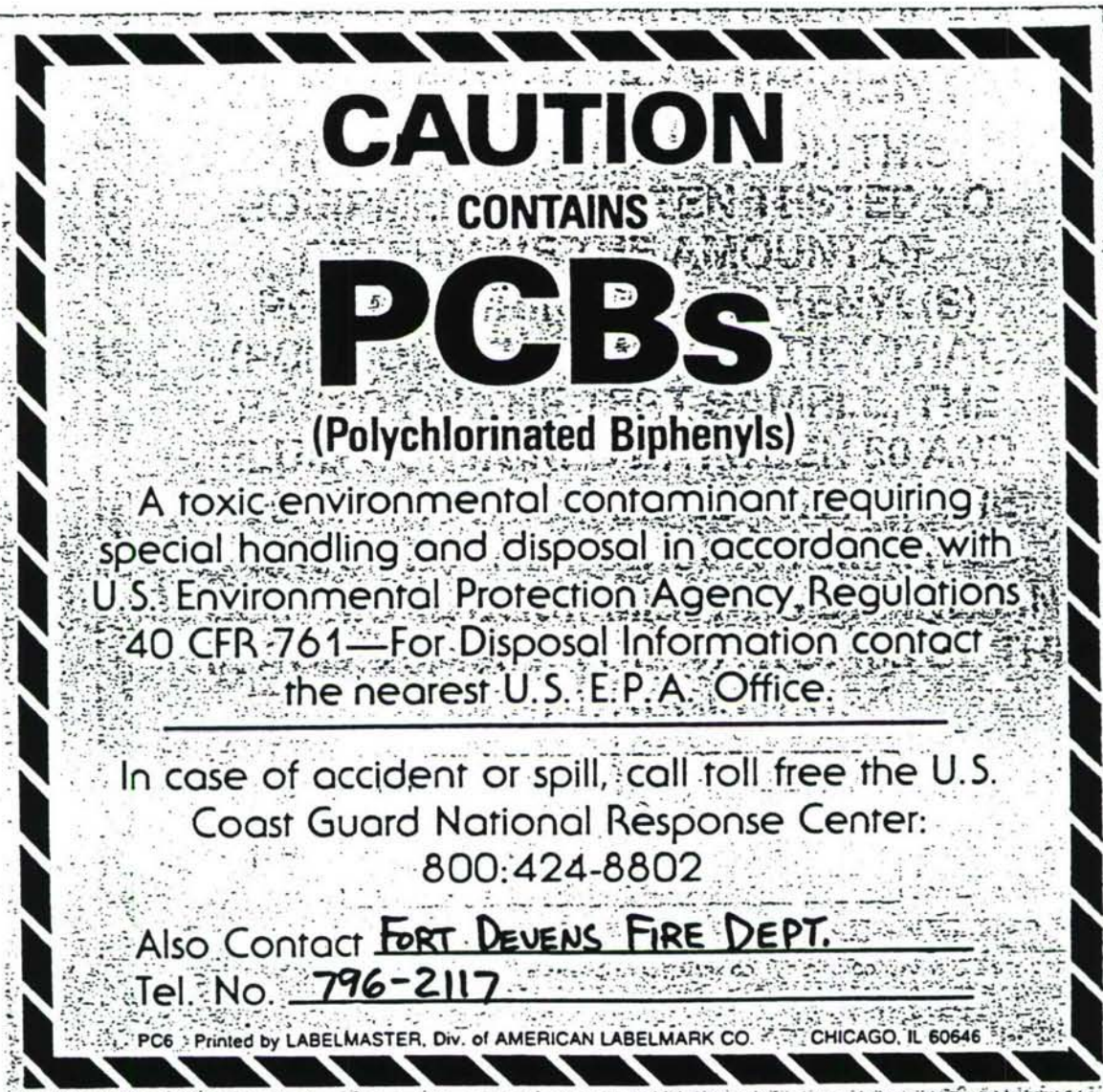


Figure 5-1
PCB LABEL

PCB Contaminated Label -- Used to designate equipment which has been tested and shows a concentration of PCBs between 50 and 500 ppm.

PCB CONTAMINATED ELECTRICAL EQUIPMENT	
THE DIELECTRIC FLUID IN THIS EQUIPMENT HAS BEEN TESTED TO DETERMINE THE AMOUNT OF POLYCHLORINATED BIPHENYL(S) (PCB CONTENT). WE CERTIFY THAT, BASED ON THE TEST SAMPLE, THE FLUID CONTAINED BETWEEN 50 AND 499 PPM OF PCB AND IS THEREFORE CLASSIFIED AS PCB CONTAMINATED ELECTRICAL EQUIPMENT AS DEFINED IN THE AUG. 25, 1982, VOL. 47, NO. 165 OF THE <u>FEDERAL REGISTER.</u>	
PCB CONCENTRATION (PPM)	ENVIRONMENTAL MANAGEMENT FORT DEVENS, MA 796-3002

Printed by LABELMASTER, Div. of AMERICAN LABELMARK CO. CHICAGO, IL 60646 STYLE PCONR

Figure 6-1
PCB CONTAMINATED LABEL

Non PCB Label -- Used where equipment is proved to be under 50 ppm PCB, either by direct testing or by manufacturer label indicating that "Non-PCB" oil was used in the equipment.

Show the concentration of PCBs in fluid, if known.

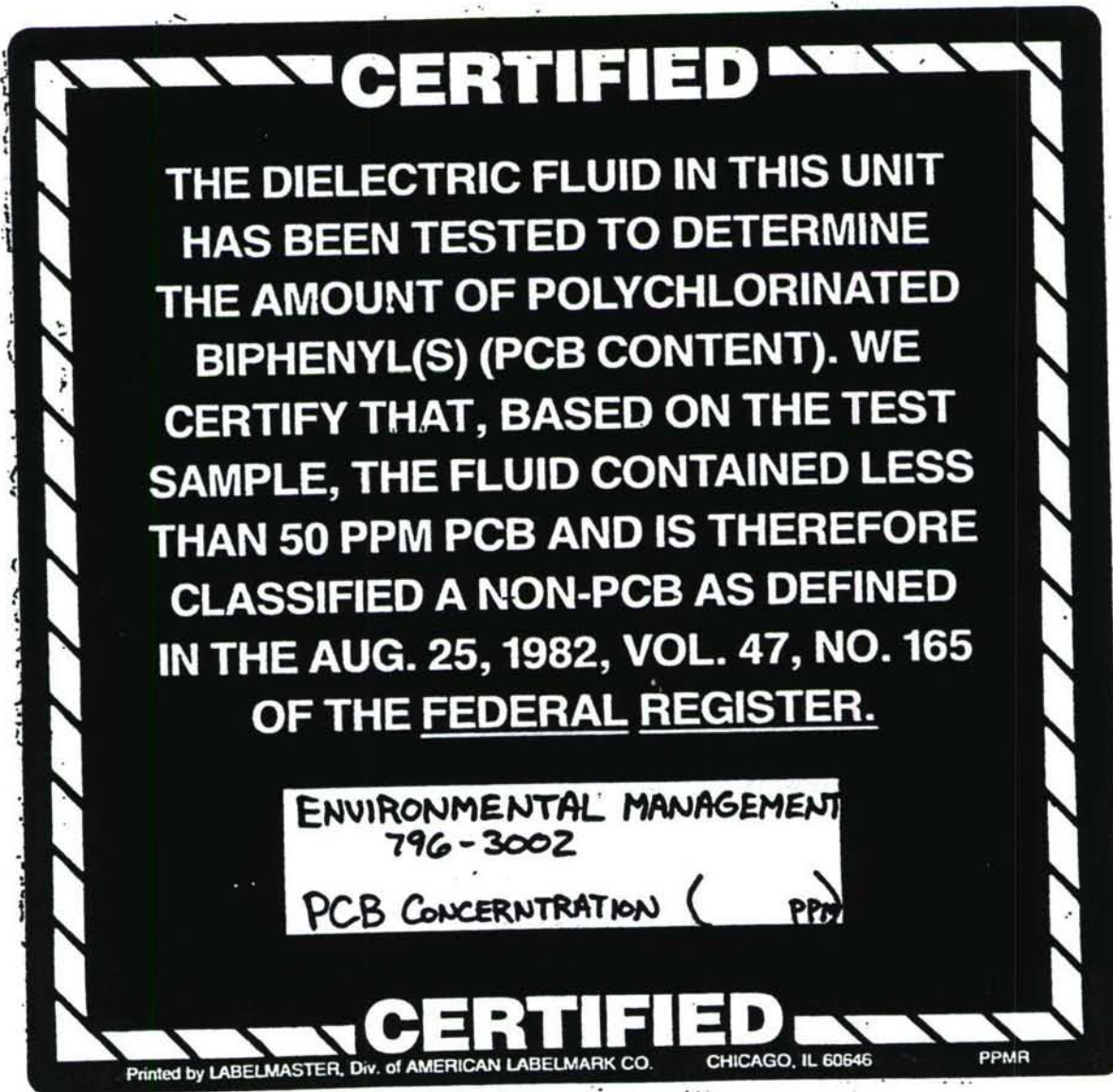


Figure 7-1
NON-PCB LABEL

Hazardous Waste Label -- Used to indicate that the equipment is stored for disposal.

Show the date of accumulation (for transformers placed in a single container show date that equipment was placed in storage for disposal) (for capacitors and ballasts removed and placed in a container such as a 55 gal drum, indicate the date that the first item was placed in the container and also indicate the date that the container was filled and placed in storage for disposal).

**HAZARDOUS
WASTE**

NAME OF WASTE PCB DIELECTRIC FLUID

HAZARD(S) TOXIC

DATE ACCUMULATION BEGAN / /19

HANDLE WITH CARE

Figure 8-1
HAZARDOUS WASTE LABEL

TABLE 1. Respiratory Protection Guidelines

CONDITION	MINIMUM RESPIRATION PROTECTION
<u>OUTDOORS</u>	
Incidental, infrequent, exposure to PCB; leaks, spills, unsealed containers	Not Required
Cleanup of leaks and spills. Sampling.	For extensive leak or spill: Self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive pressure mode. For minor leak or spill, or sampling Well defined full facepiece mask with organic vapor/pesticide cartridge, high efficiency carbon filter (color code black).
Fire and explosion involving PCB	Self contained breathing apparatus (SCBA) with full facepiece operated in pressure-demand or other positive pressure mode, or supplied air respirator with full facepiece operated in pressure demand or positive pressure mode.
<u>INDOORS</u>	
Incidental, infrequent, exposure to PCB; leaks, spills, unsealed containers	If area is well ventilated: None Required If area is not well ventilated: Well-fitted full facepiece mask with organic vapor/pesticide cartridge, high efficiency carbon filter (color code black). If area is well ventilated and spill or leak is small: Use well-fitted full facepiece mask with organic vapor/pesticide cartridge, high efficiency carbon filter (color code black). If area is not well ventilated or spill or leak is large: Use self contained breathing apparatus (SCBA) with full facepiece operated in

Table 1
RESPIRATORY PROTECTION
GUIDELINES

INDOORS (Continued)

Fire or Explosion involving PCB

pressure-demand or other positive pressure mode.

Use self contained breathing apparatus (SCBA) with full facepiece operated in pressure-demand or other positive pressure mode.

Escape

Any gas mask providing protection against pesticides.

Any escape self-contained breathing apparatus.

Table 1 (Continued)
RESPIRATORY PROTECTION
GUIDELINES

FORT DEVENS TRANSFORMER DATA

Page No. 1
10/19/92

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
FD0001	66256	3613	JACKSON ROAD	POLE	484	HARRISON	15	2.00 PPM	Y	/	/
FD0002	63AK5447	3613	JACKSON ROAD	POLE	482	WESTINGHOUSE	10	2.00 PPM	Y	/	/
FD0003	811116718	3605	PATTON ROAD	POLE	548	RTE	37.5	2.00 PPM	Y	/	/
FD0004	811116719	3605	PATTON ROAD	POLE	548	RTE	37.5	2.00 PPM	Y	/	/
FD0005	811116720	3605	PATTON ROAD	POLE	548	RTE	37.5	2.00 PPM	Y	/	/
FD0006	2769571	3605	PATTON ROAD	POLE	549	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0007	6702306	3622	PATTON ROAD	POLE	3459	G.E.	25	70.00 PPM	Y	/	/
FD0008	P649105YTD	3624	QUEENSTOWN	POLE	340	G.E.	25	2.00 PPM	Y	/	/
FD0009	25772	3624	QUEENSTOWN	POLE	341	NIAGARA	15	2.00 PPM	Y	/	/
FD0010	25771	3624	QUEENSTOWN	POLE	341	NIAGARA	15	2.00 PPM	Y	/	/
FD0011	25773	3624	QUEENSTOWN	POLE	341	NIAGARA	15	2.00 PPM	Y	/	/
FD0012	G960766	3657	QUEENSTOWN ST	POLE	3463	G.E.	50	366.00 PPM	N	05/26/92	FD0287
FD0013	7670064	3657	QUEENSTOWN ST	POLE	3463	G.E.	50	283.00 PPM	N	05/26/92	FD0288
FD0014	7671845	3657	QUEENSTOWN ST	POLE	3463	G.E.	50	316.00 PPM	N	05/26/92	FD0289
FD0015	6414112	3655	HOSP. YARD QUEENSTOWN	POLE	3448	G.E.	25	278.00 PPM	Y	/	/
FD0016	5951687	3613	QUEENSTOWN ROAD	POLE	3420	WESTINGHOUSE	25	1096.00 PPM	N	06/03/91	FD0283
FD0017	821028566	3620	QUEENSTOWN ROAD	POLE	3432	RTE	75	2.00 PPM	Y	/	/
FD0018	6414154	3609	QUEENSTOWN STREET	POLE	3422	G.E.	25	546.00 PPM	N	02/04/92	FD0140
FD0019	N856984YMX	3659	MIRROR LAKE ROAD	POLE	2004	G.E.	25	2.00 PPM	Y	/	/
FD0020	656925	3602	QUEENSTOWN ST.	POLE	1540	G.E.	25	227.00 PPM	Y	/	/
FD0021	70811472	3628	PATTON STREET	PAD	0	WESTINGHOUSE	300	2.00 PPM	Y	/	/
FD0022	3344617	3628	PATTON STREET	POLE	21	G.E.	25	2.00 PPM	Y	/	/
FD0023	PFR95661	2515	PATTON ROAD	PAD	0	WESTINGHOUSE	5000	940.00 PPM	Y	/	/
FD0024	LTC	2515	PATTON ROAD	PAD	0	WESTINGHOUSE	NA	940.00 PPM	Y	/	/
FD0025	5979923	2519	BLDG 12519	POLE	0	WESTINGHOUSE	50	2.00 PPM	Y	/	/
FD0026	6414080	2462	BLDG 12462	POLE	3227	G.E.	25	347.00 PPM	Y	/	/
FD0027	6413974	2461	BLDG 12461	POLE	3223	G.E.	25	537.00 PPM	N	02/04/92	FD0139
FD0028	H650361Y68	613	QUEENSTOWN STREET	POLE	4808	G.E.	15	2.00 PPM	Y	/	/
FD0029	H650363Y68	613	QUEENSTOWN STREET	POLE	4808	G.E.	15	2.00 PPM	Y	/	/
FD0030	H647756Y68	613	QUEENSTOWN STREET	POLE	4808	G.E.	15	2.00 PPM	Y	/	/
FD0031	6414107	2422	QUEENSTOWN STREET	POLE	3214	G.E.	25	548.00 PPM	N	05/29/91	FD0873
FD0032	7669165	614	QUEENSTOWN STREET	POLE	429	G.E.	75	750.00 PPM	N	02/18/92	FD0131
FD0033	337309713	614	QUEENSTOWN STREET	POLE	429	G.E.	75	775.00 PPM	N	02/18/92	FD0132
FD0034	767080	614	QUEENSTOWN STREET	POLE	429	G.E.	75	804.00 PPM	N	02/18/92	FD0133
FD0035	6414052	2502	PATTON	POLE	3267	G.E.	25	250.00 PPM	Y	/	/
FD0036	6413989	2508	PATTON RD	POLE	3270	G.E.	25	243.00 PPM	Y	/	/
FD0037	32622	2514	PATTON ROAD	POLE	9013	CENTRAL	10	2.00 PPM	Y	/	/
FD0038	245216	2514	PATTON RD	POLE	9013	CENTRAL	10	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0039	30283	3514	PATTON RD	POLE	9013	CENTRAL	10	2.00 PPM	Y	/	
FD0040	6414153	2435	PATTON RD	POLE	3204	G.E.	25	411.00 PPM	Y	/	
FD0041	6413963	2433	GIVRY ROAD	POLE	3009	G.E.	25	2.00 PPM	Y	/	
FD0042	6413953	2418	GIVRY RD	POLE	3211	G.E.	25	235.00 PPM	Y	/	
FD0043	6414096	2402	GIVRY ST.	POLE	420	G.E.	25	416.00 PPM	Y	/	
FD0044	K865588473AA	2476	WATER TANK RD.	POLE	0	G.E.	37.5	2.00 PPM	Y	/	
FD0045	K865587Y73AA	2476	WATER TANK RD.	POLE	0	G.E.	37.5	2.00 PPM	Y	/	
FD0046	K905115Y73AA	2476	WATER TANK RD.	POLE	0	G.E.	37.5	2.00 PPM	Y	/	
FD0047	6414054	2442	POLE 3190 BLDG T2442	POLE	3190	G.E.	25	80.00 PPM	Y	/	
FD0048	6413969	2535	WATER TANK RD	POLE	3256	G.E.	25	89.00 PPM	Y	/	
FD0049	6413981	2538	PATTON RD	POLE	3257	G.E.	25	87.00 PPM	Y	/	
FD0050	6414127	2543	PATTON RD.	POLE	3260	G.E.	25	435.00 PPM	Y	/	
FD0051	6414048	2527	PATTON RD.	POLE	3272	G.E.	25	175.00 PPM	Y	/	
FD0052	24710	2469	GIVRY ST.	POLE	3174	NIAGARA	50	2.00 PPM	Y	/	
FD0053	6414023	2438	PATTON RD.	POLE	3177	G.E.	25	72.00 PPM	Y	/	
FD0054	6413984	2407	QUEENSTOWN ST.	POLE	426	G.E.	25	235.00 PPM	Y	/	
FD0055	6414148	2207	QUEBEC STREET	POLE	411	G.E.	25	71.00 PPM	Y	/	
FD0056	3158086	2207	QUEBEC ST.	POLE	409	ALLIS CHALME	15	2.00 PPM	Y	/	
FD0057	6414055	2419	GIVRY RD	POLE	3182	G.E.	25	395.00 PPM	Y	/	
FD0058	6413998	2419	GIVRY ROAD	POLE	3181	G.E.	25	108.00 PPM	Y	/	
FD0059	311828	2415	GIVRY RD	POLE	3184	WESTINGHOUSE	5	42.00 PPM	N	04/15/92	NOT REPLACED
FD0060	6366714	2210	QUEENSTOWN RD	POLE	327	G.E.	10	290.00 PPM	Y	/	
FD0061	636559	2210	QUEENSTOWN RD	POLE	327	G.E.	10	174.00 PPM	Y	/	
FD0062	6366706	2210	QUEENSTOWN RD	POLE	327	G.E.	10	227.00 PPM	Y	/	
FD0063	2768079	2210	QUEENSTOWN RD	POLE	325	WESTINGHOUSE	25	10.00 PPM	Y	/	
FD0064	1322051	2290	QUEENSTOWN RD	POLE	3153	LINE MATERIA	50	2.00 PPM	Y	/	
FD0065	68AB10597	677	QUEBEC ST.	POLE	259	WESTINGHOUSE	37.5	2.00 PPM	Y	/	
FD0066	68AB10589	677	QUEBEC ST.	POLE	259	WESTINGHOUSE	37.5	2.00 PPM	Y	/	
FD0067	68AB10603	677	QUEBEC ST.	POLE	259	WESTINGHOUSE	37.5	2.00 PPM	Y	/	
FD0068	6413949	678	QUEBEC ST.	POLE	257	G.E.	25	288.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0069	6413934	678	QUEBEC ST.	POLE	257	G.E.	25	364.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0070	6473942	678	QUEBEC ST.	POLE	257	G.E.	25	338.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0071	68G6927	666	QUEBEC ST.	PAD	0	WESTINGHOUSE	112.5	2.00 PPM	Y	/	
FD0072	8200464	665	QUEBEC STREET	PAD	0	SQUARE D	300	2.00 PPM	Y	/	
FD0073	8200461	657	QUEBEC ST.	PAD	0	SQUARE D	300	2.00 PPM	Y	/	
FD0074	L444618T73AA	641	QUEBEC STREET	PAD	0	G.E.	300	2.00 PPM	Y	/	
FD0075	P010400	658	QUEENSTOWN STREET	PAD	0	G.E.	300	2.00 PPM	Y	/	
FD0076	P187079TSC	673	QUEENSTOWN ST.	PAD	0	G.E.	225	2.00 PPM	Y	/	

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0077	6866926	674	QUEENSTOWN STREET	PAD	0	WESTINGHOUSE	112.5	2.00 PPM	Y	/	/
FD0078	68AB11667	603	QUEENSTOWN STREET	POLE	4157	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0079	68AB11668	603	QUEENSTOWN ST.	POLE	4157	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0080	68AB11672	603	QUEENSTOWN ST.	POLE	4157	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0081	68AB11675	606	QUEENSTOWN ST.	POLE	4170	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0082	68AB11666	606	QUEENSTOWN ST.	POLE	4170	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0083	68AB11674	606	POLE 4170 BLDG 606	POLE	4170	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0084	68AB11673	601	POLE 309 BLDG 601	POLE	309	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0085	68AB11669	601	POLE 309 BLDG 601	POLE	309	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0086	68AB11670	601	POLE 309 BLDG 601	POLE	309	WESTINGHOUSE	15	2.00 PPM	Y	/	/
FD0087	6413954	2283	QUEENSTOWN ST.	POLE	3144	G.E.	25	285.00 PPM	Y	/	/
FD0088	6413952	2288	QUEBEC ST.	POLE	3140	G.E.	25	295.00 PPM	Y	/	/
FD0089	TR000758	0	QUEBEC ST. BASKETBALL COURT	PAD	0	TRANS. SALES	25	2.00 PPM	Y	/	/
FD0090	68AA11360	676	QUEENSTOWN ST.	POLE	4144	WESTINGHOUSE	10	2.00 PPM	Y	/	/
FD0091	68AA11946	676	QUEENSTOWN ST.	POLE	4144	WESTINGHOUSE	10	2.00 PPM	Y	/	/
FD0092	68AA4775	676	QUEENSTOWN ST.	POLE	4144	WESTINGHOUSE	10	2.00 PPM	Y	/	/
FD0093	6811283	675	QUEENSTONE ST.	POLE	4142	G.E.	10	427.00 PPM	Y	/	/
FD0094	6811247	675	QUEENSTONE ST.	POLE	4142	G.E.	10	462.00 PPM	Y	/	/
FD0095	6283238	675	QUEENSTONE ST	POLE	4142	G.E.	10	460.00 PPM	Y	/	/
FD0096	H648423Y68	617	QUEENSTONE ST.	POLE	4726	G.E.	15	2.00 PPM	Y	/	/
FD0097	H650364Y68	617	QUEENSTONE ST.	POLE	4726	G.E.	15	2.00 PPM	Y	/	/
FD0098	H637165Y68	617	QUEENSTONE ST.	POLE	4726	G.E.	15	2.00 PPM	Y	/	/
FD0099	65F9354	2007	QUEENSTONE ST	POLE	296	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0100	65G14351	2007	QUEENSTON ST.	POLE	296	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0101	65AJ2448	2007	QUEENSTONE ST.	POLE	296	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0102	66G7424	2008	QUEENSTONE ST	POLE	2011	WAGNER	10	2.00 PPM	Y	/	/
FD0103	L6F7187	2008	QUEENSTONE ST.	POLE	2011	WAGNER	10	2.00 PPM	Y	/	/
FD0104	G6F7011	2008	QUEENSTONE ST	POLE	2011	WAGNER	10	2.00 PPM	Y	/	/
FD0105	6413937	2011	PINE ST.	POLE	1006	G.E.	25	241.00 PPM	Y	/	/
FD0106	6414047	2011	PINE ST	POLE	1006	G.E.	25	240.00 PPM	Y	/	/
FD0107	6952815	2011	PINE ST	POLE	1006	G.E.	25	174.00 PPM	Y	/	/
FD0108	6413985	2013	PINE ST.	POLE	1007	G.E.	25	173.00 PPM	Y	/	/
FD0109	8001387	2014	PINE ST.	POLE	1008	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0110	6413962	2005	PARKING LOT	POLE	3110	G.E.	25	445.00 PPM	Y	/	/
FD0111	6413957	2005	PARKING LOT	POLE	3110	G.E.	25	432.00 PPM	Y	/	/
FD0112	6414142	2005	PARKING LOT	POLE	3110	G.E.	25	434.00 PPM	Y	/	/
FD0113	6827731	3582	MC ARTHUR ST	POLE	195	G.E.	5	134.00 PPM	Y	/	/
FD0114	D20927657P	2004	EL CANEY	POLE	1224	G.E.	15	46.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0115	6577945	42	EL CANEY	POLE	1219	G.E.	10	2.00 PPM	Y	/	
FD0116	3382257	67	ELM ALLEY	POLE	1948	WESTINGHOUSE	15	35.00 PPM	Y	/	
FD0117	2769554	2020	PINE ST.	POLE	1006	WESTINGHOUSE	25	2.00 PPM	Y	/	
FD0118	L825246YDLA	1676	CAREY ST.	POLE	0	G.E.	50	2.00 PPM	Y	/	
FD0119	L825244YDLA	1676	CAREY ST.	POLE	0	G.E.	50	2.00 PPM	Y	/	
FD0120	L825245YDLA	1676	CAREY ST.	POLE	0	G.E.	50	2.00 PPM	Y	/	
FD0121	J560826Y70A	227	BUENA VISTA ST	POLE	4320	G.E.	37.5	2.00 PPM	Y	/	
FD0122	J560023Y70A	2000	ROOSEVELT CIR.	POLE	199	G.E.	37.5	2.00 PPM	Y	/	
FD0123	J623290Y71AA	2000	ROOSEVELT CIR.	POLE	199	G.E.	37.5	2.00 PPM	Y	/	
FD0124	L825687YDLA	667	MCARTHUR ST.	POLE	667	G.E.	15	2.00 PPM	Y	/	
FD0125	L825685YDLA	667	MCARTHUR T.	POLE	667	G.E.	15	2.00 PPM	Y	/	
FD0126	L825686YDLA	667	MCARTHUR ST.	POLE	667	G.E.	15	2.00 PPM	Y	/	
FD0127	6287290	2025	ROOSEVELT CIR.	POLE	3112	G.E.	10	1115.00 PPM	N	08/22/91	? COE INSTALLED INFO PENDING
FD0128	D61557357Y	689	MCARTHUR ST.	POLE	4869	G.E.	37.5	2.00 PPM	Y	/	
FD0129	D61676957Y	689	MCARTHUR ST	POLE	4859	G.E.	37.5	2.00 PPM	Y	/	
FD0130	D61557657Y	689	MCARTHUR ST.	POLE	4859	G.E.	37.5	2.00 PPM	Y	/	
FD0131	H658387Y68	614	QUEENSTOWN ST	POLE	429	G.E.	10	2.00 PPM	Y	/	
FD0132	H658395Y68	614	QUEENSTOWN ST	POLE	429	G.E.	10	2.00 PPM	Y	/	
FD0133	H658391Y68	614	QUEENSTOWN ST	POLE	429	G.E.	10	2.00 PPM	Y	/	
FD0134	6414000	683	QUEBEC ST.	POLE	244	G.E.	25	254.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0135	6413959	0	QUEBEC ST	POLE	4299	G.E.	25	175.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0136	H659848Y68A	681	QUEBEC ST.	POLE	249	G.E.	25	2.00 PPM	Y	/	
FD0137	H659854Y68A	681	QUEBEC ST.	POLE	249	G.E.	25	2.00 PPM	N	/	?
FD0138	H659849Y68A	3768	DAKOTA ST NATIONAL GUARD	POLE	4462	G.E.	25	2.00 PPM	Y	/	
FD0139	H661059Y68A	2461	BLDG T2461	POLE	3223	G.E.	25	2.00 PPM	Y	/	
FD0140	H661058Y68A	3609	QUEENSTOWN ST	POLE	3422	G.E.	25	2.00 PPM	Y	/	
FD0141	H661056Y68A	680	QUEBEC ST	POLE	251	G.E.	25	2.00 PPM	Y	/	
FD0142	24546	5	MUSEUM ON ANTIETAM ST	PAD	0	NIAGARA	25	2.00 PPM	Y	/	
FD0143	24550	5	MUSEUM ON ANTIETAM ST	PAD	0	NIAGARA	25	2.00 PPM	Y	/	
FD0144	24549	5	MUSEUM ON ANTIETAM ST	PAD	0	NIAGARA	25	2.00 PPM	Y	/	
FD0145	6413979	638	QUEENSTONE ST.	POLE	4292	G.E.	25	77.00 PPM	Y	/	
FD0146	N437075YCJA	642	QUEBEC ST.	POLE	4291	G.E.	15	2.00 PPM	Y	/	
FD0147	N437074YCJA	642	QUEBEC ST.	POLE	4291	G.E.	15	2.00 PPM	Y	/	
FD0148	69AE4890	642	QUEBEC ST.	POLE	4291	G.E.	15	2.00 PPM	Y	/	
FD0149	6413994	642	BETWEEN BLDG	POLE	4153	G.E.	25	411.00 PPM	Y	/	
FD0150	253542	696	PARKING LOT	POLE	4135	LINE MATERIA	10	2.00 PPM	Y	/	
FD0151	H658151Y68A	696	SHERMAN AVE.	POLE	94	G.E.	37.5	2.00 PPM	Y	/	
FD0152	H658150Y68A	696	SHERMAN AVE.	POLE	94	G.E.	37.5	2.00 PPM	Y	/	

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0153	H660602Y68A	696	SHERMAN AVE.	POLE	94	G.E.	37.5	2.00 PPM	Y	/	
FD0154	6414014	694	SHERMAN AVE.	POLE	99	G.E.	25	412.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0155	D61557557Y	650	SHERMAN AVE.	POLE	5073	G.E.	37.5	2.00 PPM	Y	/	
FD0156	D61557457Y	650	SHERMAN AVE.	POLE	5073	G.E.	37.5	2.00 PPM	Y	/	
FD0157	D61557757Y	650	SHERMAN AVE.	POLE	5073	G.E.	37.5	2.00 PPM	Y	/	
FD0158	6413948	692	PARKING LOT	POLE	4128	G.E.	25	86.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0159	6413935	692	PARKING LOT	POLE	4128	G.E.	25	83.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0160	6413929	692	PARKING LOT	POLE	4128	G.E.	25	87.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0161	6414145	687	MCARTHUR AVE.	POLE	4855	G.E.	25	79.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0162	6413966	687	MCARTHUR AVE.	POLE	4855	G.E.	25	85.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0163	6413956	687	MCARTHUR AVE.	POLE	4855	G.E.	25	76.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0164	6414081	685	MCARTHUR AVE.	POLE	4854	G.E.	25	90.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0165	6413976	685	MCARTHUR AVE.	POLE	4854	G.E.	25	97.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0166	6413932	685	MCARTHUR AVE.	POLE	4854	G.E.	25	91.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0167	73TH052001	685	SOFTBALL FIELD	POLE	4523	MCGRAW EDISO	15	2.00 PPM	Y	/	
FD0168	73TH052012	685	SOFTBALL FIELD	POLE	4523	MCGRAW EDISO	15	2.00 PPM	Y	/	
FD0169	73TH052002	685	SOFTBALL FIELD	POLE	4523	MCGRAW EDISO	15	2.00 PPM	Y	/	
FD0170	73TH052010	653	SOFTBALL FIELD	POLE	4528	MCGRAW EDISO	15	2.00 PPM	Y	/	
FD0171	P600877YPD	653	SOFTBALL FIELD	POLE	8528	G.E.	15	2.00 PPM	Y	/	
FD0172	73TH052006	653	SOFTBALL FIELD	POLE	4528	MCGRAW EDISO	15	2.00 PPM	Y	/	
FD0173	6413960	653	MCARTHUR AVE.	POLE	4285	G.E.	25	125.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0174	D29169958P	653	MCARTHUR AVE.	POLE	0	G.E.	25	132.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0175	D28325458P	653	MCARTHUR AVE.	POLE	4285	G.E.	25	134.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0176	D29049958P	647	MCARTHUR AVE.	POLE	228	G.E.	10	136.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0177	D29167058P	646	MCARTHUR AVE.	POLE	4283	G.E.	25	122.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0178	D29169658P	646	MCARTHUR AVE.	POLE	4283	G.E.	25	123.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0179	D28760758P	646	MCARTHUR AVE.	POLE	4283	G.E.	25	122.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0180	6414117	622	SHERMAN AVE	POLE	120	G.E.	25	430.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0181	6414105	2679	LAKE GEORGE ST.	POLE	502	G.E.	25	429.00 PPM	Y	/	
FD0182	6414150	2728	LAKE GEORGE ST.	POLE	500	G.E.	25	432.00 PPM	Y	/	
FD0183	1955895	559	SPRUCE ST.	POLE	489	LINE MATERIA	25	2.00 PPM	Y	/	
FD0184	1955894	558	SPRUCE ST.	POLE	1491	LINE MATERIA	25	2.00 PPM	Y	/	
FD0185	8001370	549	SPRUCE ST.	POLE	1487	LINE MATERIA	37.5	2.00 PPM	Y	/	
FD0186	8138077	3712	REAR DAKOTA STREET	POLE	3534	G.E.	3	25.00 PPM	Y	/	
FD0187	1928402	933	PERIMETER ROAD	POLE	1107	LINE MATERIA	15	2.00 PPM	Y	/	
FD0188	66255	933	PERIMETER ROAD	POLE	1107	HARRISON	15	2.00 PPM	Y	/	
FD0189	66254	933	PERIMETER ROAD	POLE	1107	HARRISON	15	2.00 PPM	Y	/	
FD0190	1927167	935	PERIMETER ROAD	POLE	1112	LINE MATERIA	15	2.00 PPM	Y	/	

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0191	1914768	935	PERIMETER ROAD	POLE	1112	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0192	8001195	935	SHIRLEY HOUSING AREA	POLE	1112	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0193	1930451	937	PERIMETER RD	POLE	1116	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0194	1930440	937	PERIMETER ROAD	POLE	1116	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0195	1930449	937	PERIMETER ROAD	POLE	1116	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0196	1929709	942	PERIMETER ROAD	POLE	4101	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0197	1929714	942	PERIMETER ROAD	POLE	4101	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0198	1914765	942	PERIMETER ROAD	POLE	4101	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0199	1709754	938	PERIMETER ROAD	POLE	1119	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0200	1930437	938	PERIMETER ROAD	POLE	1119	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0201	1709746	938	PERIMETER ROAD	POLE	1119	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0202	1949386	939	ELLIOT ROAD	POLE	981	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0203	A6367907	939	ELLIOT ROAD	POLE	981	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0204	A6367915	939	ELLIOT ROAD	POLE	981	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0205	1929706	944	ELLIOT ST	POLE	0	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0206	1940713	944	ELLIOT ST	POLE	0	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0207	1929710	944	ELLIOT ST	POLE	0	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0208	1884264	950	ELLIOT ST	POLE	0	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0209	1884268	950	ELLIOT ST	POLE	0	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0210	1884265	950	ELLIOT ST	POLE	0	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0211	1929708	930	HOSPITAL ROAD	POLE	1039	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0212	1929704	930	HOSPITAL ROAD	POLE	1039	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0213	1927165	930	HOSPITAL ROAD	POLE	1039	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0214	C463908	946	PERIMETER ROAD	POLE	0	G.E.	15	54.00 PPM	Y	/	/
FD0215	66260	946	PERIMETER ROAD	POLE	0	HARRISON	15	2.00 PPM	Y	/	/
FD0216	1929703	946	PERIMETER ROAD	POLE	0	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0217	8001384	535	OAK STREET	POLE	1409	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0218	8001378	539	OAK STREET	POLE	1413	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0219	P233045YNB	3752	DAKOTA ST NATIONAL GUARD	POLE	3494	G.E.	25	2.00 PPM	Y	/	/
FD0220	N418357YAU	0	LOVELL STREET TRAILER PK LOT 3	POLE	1861	G.E.	25	2.00 PPM	Y	/	/
FD0221	87A343519	0	LOVELL STREET TRAILER PK LOT 19	POLE	1869	SQUARE D	25	2.00 PPM	N	08/25/92	NOT REPL IN STRG FOR REUSE
FD0222	H660009Y68A	0	LOVELL STREET TRAILER PK LOT 24	POLE	4118	G.E.	37.5	2.00 PPM	Y	/	/
FD0223	H660604Y68A	0	LOVELL STREET TRAILER PK LOT 1	POLE	4115	G.E.	37.5	2.00 PPM	Y	/	/
FD0224	H660010Y68A	0	LOVELL STREET TRAILER PK LOT 12	POLE	0	G.E.	37.5	2.00 PPM	Y	/	/
FD0225	P600879YPO	2735	GIVRY STREET	POLE	405	G.E.	15	2.00 PPM	Y	/	/
FD0226	6413945	2730	GIVRY ST.	POLE	397	G.E.	25	356.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0227	6413999	2730	GIVRY ST.	POLE	397	G.E.	25	362.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0228	6414006	2730	GIVRY ST.	POLE	397	G.E.	25	362.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
FD0229	6413983	2732	JACKSON ST.	POLE	442	G.E.	25	548.00 PPM	N	09/14/91	? COE INSTALLED INFO PENDING
FD0230	M364875YKNA	2668	GEORGE STREET	POLE	506	G.E.	25	2.00 PPM	Y	/	/
FD0231	6414115	2662	GEORGE ST.	POLE	3328	G.E.	25	293.00 PPM	Y	/	/
FD0232	6414079	2675	GEORGE ST.	POLE	3332	G.E.	25	2.00 PPM	Y	/	/
FD0233	J609803Y71AA	2687	JACKSON ST.	POLE	3305	G.E.	25	2.00 PPM	Y	/	/
FD0234	J609807Y71AA	2687	JACKSON ST.	POLE	3305	G.E.	25	2.00 PPM	Y	/	/
FD0235	J606482Y70AA	2687	JACKSON ST.	POLE	3305	G.E.	25	2.00 PPM	Y	/	/
FD0236	64A86662	2651	JACKSON ST.	POLE	3302	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0237	1733087	584	MAPLE	POLE	425	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0238	1694839	568	SPRUCE	POLE	1380	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0239	8001382	898	PLUM	POLE	1441	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0240	8001377	882	SPRUCE	POLE	1390	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0241	8001383	849	BIRCH CIRCLE & CEDAR CREEK	POLE	1394	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0242	8001381	893	BEECH	POLE	1452	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0243	8001385	837	BIRCH CIRCLE	POLE	1360	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0244	8001380	829	BIRCH CIRCLE	POLE	1352	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0245	1884276	839	BIRCH CIRCLE	POLE	1345	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0246	8001379	842	BIRCH CIRCLE	POLE	1339	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0247	24709	845	BIRCH CIRCLE	POLE	1335	NIAGARA	50	2.00 PPM	Y	/	/
FD0248	8001369	877	HOSPITAL ROAD	POLE	1090	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0249	8001386	868	GRANT AVENUE	POLE	1166	LINE MATERIA	37.5	2.00 PPM	Y	/	/
FD0250	5979921	869	GRANT AVENUE	POLE	1168	WESTINGHOUSE	50	238.00 PPM	Y	/	/
FD0251	C464487	387	GRANT AVENUE	POLE	1176	G.E.	25	44.00 PPM	Y	/	/
FD0252	C461086	347	GRANT AVENUE	POLE	1185	G.E.	25	144.00 PPM	Y	/	/
FD0253	1940705	344	ANTIETAM	POLE	881	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0254	1928114	350	ANTIETAM	POLE	883	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0255	P649107YTD	345	ANTIETAM	POLE	882	G.E.	25	2.00 PPM	Y	/	/
FD0256	87A343521	0	76TH DIVISION ST. TENNIS COURT	POLE	1308	SQUARE D	25	2.00 PPM	Y	/	/
FD0257	C424300	355	ANTIETAM & CHANCE ST	POLE	1196	G.E.	25	99.00 PPM	Y	/	/
FD0258	P059787YOA	61	ANTIETAM	POLE	1199	G.E.	37.5	2.00 PPM	Y	/	/
FD0259	N856981YMK	57	ANTIETAM	POLE	1204	G.E.	25	2.00 PPM	Y	/	/
FD0260	68F10884	52	EL CANEY	POLE	1209	WESTINGHOUSE	25	172.00 PPM	Y	/	/
FD0261	P059579YOA	47	EL CANEY	POLE	1214	G.E.	25	2.00 PPM	Y	/	/
FD0262	6414066	71	ELM ALLEY	POLE	1953	G.E.	25	480.00 PPM	Y	/	/
FD0263	68F13694	46	WALNUT	POLE	1251	WESTINGHOUSE	25	168.00 PPM	Y	/	/
FD0264	6414122	77	ELM ALLEY	POLE	1960	G.E.	25	396.00 PPM	Y	/	/
FD0265	6677065	73	ELM & SHERMAN ST.	POLE	78	G.E.	5	73.00 PPM	N	09/25/91	FD0872
FD0266	6414053	0	NCO CLUB PARKING LOT STREET LIGH	POLE	0	G.E.	25	230.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0267	30926	22	SHERMAN	POLE	72	CENTRAL	15	17.00 PPM	Y	/	/
FD0268	309219	22	SHERMAN	POLE	72	CENTRAL	15	17.00 PPM	Y	/	/
FD0269	30923	22	SHERMAN	POLE	72	CENTRAL	15	17.00 PPM	Y	/	/
FD0270	61822913	19	SHERMAN	POLE	0	POLE STAR	50	76.00 PPM	Y	/	/
FD0271	61822914	19	SHERMAN	POLE	0	POLE STAR	50	73.00 PPM	Y	/	/
FD0272	61822911	19	SHERMAN	POLE	0	POLE STAR	50	81.00 PPM	Y	/	/
FD0273	59L13362	2	BUENA VISTA	POLE	4500	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0274	59L13394	2	BUENA VISTA	POLE	4500	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0275	59L13393	2	BUENA VISTA	POLE	4500	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0276	6716162	25	BALL BLUFF	POLE	0	G.E.	25	139.00 PPM	Y	/	/
FD0277	6414040	25	BALL BLUFF	POLE	0	G.E.	25	190.00 PPM	Y	/	/
FD0278	6413995	25	BALL BLUFF	POLE	0	G.E.	25	84.00 PPM	Y	/	/
FD0279	6413991	25	BALL BLUFF	POLE	870	G.E.	25	97.00 PPM	Y	/	/
FD0280	P600881YPO	26	BALL BLUFF	POLE	5014	G.E.	15	2.00 PPM	Y	/	/
FD0281	6414034	2640	BARBARA	POLE	3323	G.E.	25	253.00 PPM	Y	/	/
FD0282	6414147	2644	LAKE GEORGE	POLE	511	G.E.	25	402.00 PPM	Y	/	/
FD0283	275271	3619	QUEENSTOWN ST	POLE	3430	LINE MATERIA	5	2.00 PPM	Y	/	/
FD0284	6414071	2624	LAKE GEORGE	POLE	3316	G.E.	25	292.00 PPM	Y	/	/
FD0285	3175622	2601	LAKE GEORGE	POLE	525	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0286	85NJ205002	2613	LAKE GEORGE	POLE	0	MCGRAW EDISO	25	2.00 PPM	Y	/	/
FD0287	25063	3657	QUEENSTOWN ST (GOLF COURSE PUMP)	POLE	3463	CENTRAL	37.5	20.00 PPM	Y	/	/
FD0288	25065	3657	QUEENSTOWN ST (GOLF COURSE PUMP)	POLE	3463	CENTRAL	37.5	20.00 PPM	Y	/	/
FD0289	25064	3657	QUEENSTOWN ST (GOLF COURSE PUMP)	POLE	3463	CENTRAL	37.5	2.00 PPM	Y	/	/
FD0290	89A400658	1423	D E H BLDG	POLE	0	WESTINGHOUSE	100	2.00 PPM	Y	/	/
FD0291	89A400657	1423	D E H BLDG	POLE	0	WESTINGHOUSE	100	2.00 PPM	Y	/	/
FD0292	89A400656	1423	D E H BLDG	POLE	0	WESTINGHOUSE	100	2.00 PPM	Y	/	/
FD0293	89A423348	1423	D E H BLDG	POLE	0	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0294	89A423347	1423	D E H BLDG	POLE	0	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0295	89A354376	1423	D E H BLDG	POLE	0	WESTINGHOUSE	50	2.00 PPM	Y	/	/
FD0296	89A354375	1423	D E H BLDG	POLE	0	WESTINGHOUSE	50	2.00 PPM	Y	/	/
FD0297	89A354377	1423	D E H BLDG	POLE	0	WESTINGHOUSE	50	2.00 PPM	Y	/	/
FD0298	86A461985	1423	D E H BLDG	POLE	0	WESTINGHOUSE	167	2.00 PPM	Y	/	/
FD0299	86A461984	1423	D E H BLDG	POLE	0	WESTINGHOUSE	167	2.00 PPM	Y	/	/
FD0300	86A461986	1423	D E H BLDG	POLE	0	WESTINGHOUSE	167	2.00 PPM	Y	/	/
FD0301	K698725Y72AA	1423	D E H BLDG	POLE	0	G.E.	10	2.00 PPM	Y	/	/
FD0302	K698721Y72AA	1423	D E H BLDG	POLE	0	G.E.	10	2.00 PPM	Y	/	/
FD0303	K698720Y72AA	1423	D E H BLDG	POLE	0	G.E.	10	2.00 PPM	Y	/	/
FD0304	P643729YTD	1423	D E H BLDG	POLE	0	G.E.	15	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0305	P550508YYC	1423	D E H BLDG	POLE	0	G.E.	15	2.00 PPM	Y	/	
FD0306	P691347YWD	1423	D E H BLDG	POLE	0	G.E.	15	2.00 PPM	Y	/	
FD0307	P688563YWD	1423	D E H BLDG	POLE	0	G.E.	15	2.00 PPM	Y	/	
FD0308	P624886YRD	1423	D E H BLDG	POLE	0	G.E.	15	2.00 PPM	Y	/	
FD0309	P643730YTD	1423	D E H BLDG	POLE	0	G.E.	15	2.00 PPM	Y	/	
FD0310	P577246YND	1423	D E H BLDG	POLE	0	G.E.	15	2.00 PPM	Y	/	
FD0311	P684756YWD	1423	D E H BLDG	POLE	0	G.E.	15	2.00 PPM	Y	/	
FD0312	K786044Y72AA	1423	D E H BLDG	POLE	0	G.E.	37.5	2.00 PPM	Y	/	
FD0313	K786046Y72AA	1423	D E H BLDG	POLE	0	G.E.	37.5	2.00 PPM	Y	/	
FD0314	NA	1423	D E H BLDG	POLE	0	G.E.	37.5	2.00 PPM	Y	/	
FD0315	100016N	1423	D E H BLDG	POLE	0	PRECISION	3	2.00 PPM	Y	/	
FD0316	100021N	202	CAVITE ST & CAREY ST	POLE	1905	PRECISION	3	2.00 PPM	Y	/	
FD0317	100019N	1423	D E H BLDG	POLE	0	PRECISION	3	2.00 PPM	Y	/	
FD0318	83A351126	207	CAREY ST	POLE	190	WESTINGHOUSE	45	2.00 PPM	Y	/	
FD0319	L45032173AA	637	QUEENSTOWN	PAD	0	G.E.	300	2.00 PPM	Y	/	
FD0320	L450487174AA	638	QUEENSTOWN	PAD	0	G.E.	300	2.00 PPM	Y	/	
FD0321	L444616173AA	644	QUEENSTOWN	PAD	0	G.E.	300	2.00 PPM	Y	/	
FD0322	N5937321BRA	642	QUEENSTOWN	PAD	0	G.E.	300	2.00 PPM	Y	/	
FD0323	L462267174AA	2021	PINE ST.	PAD	0	G.E.	750	2.00 PPM	Y	/	
FD0324	00360	2001	MCARTHUR	PAD	0	T & R ELECTR	112.5	26.00 PPM	Y	/	
FD0325	H25863368P	697	MCARTHUR	PAD	0	G.E.	112.5	2.00 PPM	Y	/	
FD0326	8200463	694	SHERMAN	PAD	0	SQUARE D	300	2.00 PPM	Y	/	
FD0327	A42A123F80	1960	CAVITE	PAD	0	WESTINGHOUSE	112.5	2.00 PPM	Y	/	
FD0328	A42A123F80	1689	CAVITE	PAD	0	WESTINGHOUSE	112.5	2.00 PPM	Y	/	
FD0329	A42A123F80	1692	CAVITE	PAD	0	WESTINGHOUSE	112.5	2.00 PPM	Y	/	
FD0330	A42A123F80	1691	CAVITE	PAD	0	WESTINGHOUSE	112.5	2.00 PPM	Y	/	
FD0331	A42A123F80	1688	CAVITE	PAD	0	WESTINGHOUSE	112.5	2.00 PPM	Y	/	
FD0332	A42A123F80	1687	CAVITE	PAD	0	WESTINGHOUSE	112.5	2.00 PPM	Y	/	
FD0333	TAT83760101	1612	CAVITE	PAD	0	WESTINGHOUSE	750	2.00 PPM	Y	/	
FD0334	C575149	1	CAVITE	POLE	4233	G.E.	25	20.00 PPM	Y	/	
FD0335	C552361	0	CAVITE	POLE	4233	G.E.	25	21.00 PPM	Y	/	
FD0336	C552313	1696	CAVITE	POLE	4233	G.E.	25	20.00 PPM	Y	/	
FD0337	65E3834	2729	GIVRY	PAD	0	WESTINGHOUSE	225	406.00 PPM	Y	/	
FD0338	P177143	2680	LAKE GEORGE	PAD	0	G.E.	75	2.00 PPM	Y	/	
FD0339	ABR3475	620	GRANT	PAD	0	WESTINGHOUSE	112.5	152.00 PPM	Y	/	
FD0340	8200462	649	SHERMAN	PAD	0	SQUARE D	300	2.00 PPM	Y	/	
FD0341	L450486174AA	648	SHERMAN	PAD	0	G.E.	300	2.00 PPM	Y	/	
FD0342	L459338174AA	647	MCARTHUR	PAD	0	G.E.	300	2.00 PPM	Y	/	

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
F00343	L459340T74AA	652	MCARTHUR	PAD	0	G.E.	300	2.00 PPM	Y	/	
F00344	L459341T74AA	651	SHERMAN	PAD	0	G.E.	300	2.00 PPM	Y	/	
F00345	L450405T74AA	655	SHERMAN	PAD	0	G.E.	300	2.00 PPM	Y	/	
F00346	L708753TFLA	624	GIVRY ST.	PAD	0	G.E.	300	2.00 PPM	Y	/	
F00347	846009362	623	GIVRY	PAD	0	RTE	300	2.00 PPM	Y	/	
F00348	A42A760056	690	MCARTHUR	PAD	0	WESTINGHOUSE	75	2.00 PPM	Y	/	
F00349	L459339T74AA	693	MCARTHUR	PAD	0	G.E.	300	2.00 PPM	Y	/	
F00350	TAT83940101	2613	LAKE GEORGE	PAD	0	WESTINGHOUSE	1500	2.00 PPM	Y	/	
F00351	6413982	3597	CORNER OF ELM & MCARTHUR	POLE	185	G.E.	25	360.00 PPM	Y	/	
F00352	189571L	3597	CORNER OF ELM & MCARTHUR	POLE	3388	POLE STAR	25	2.00 PPM	Y	/	
F00353	N437073YCVA	0	CORNER DAKOTA & MCARTHUR	POLE	189	G.E.	15	2.00 PPM	Y	/	
F00354	6414139	3596	T3596	POLE	3355	G.E.	25	450.00 PPM	Y	/	
F00355	P003447	3578	DAKOTA STREET	PAD	0	G.E.	500	2.00 PPM	Y	/	
F00356	C553174	3572	EL CANEY	POLE	1230	G.E.	50	89.00 PPM	Y	/	
F00357	P060034YOA	3577	EL CANEY	POLE	3391	G.E.	15	2.00 PPM	Y	/	
F00358	P060029YOA	3577	BLDG 3577	POLE	3391	G.E.	15	2.00 PPM	Y	/	
F00359	P060031YOA	3577	EL CANEY	POLE	3391	G.E.	15	2.00 PPM	Y	/	
F00360	6517279	155	CAVITE STREET	POLE	993	G.E.	10	97.00 PPM	Y	/	
F00361	100202N	0	CORNER BUENA VISTA & MCARTHUR	POLE	164	PRECISION	3	2.00 PPM	Y	/	
F00362	6413930	16	BUENA VISTA STREET	POLE	937	G.E.	25	140.00 PPM	Y	/	
F00363	6566619	16	ACROSS FROM YOUTH CENTER	POLE	938	G.E.	25	96.00 PPM	Y	/	
F00364	6566624	16	ACROSS FROM YOUTH CENTER	POLE	938	G.E.	25	92.00 PPM	Y	/	
F00365	6566582	16	ACROSS FROM YOUTH CENTER	POLE	938	G.E.	25	168.00 PPM	Y	/	
F00366	82A062006	14	ACROSS FROM PROVOST MARSHALL	POLE	939	WESTINGHOUSE	25	2.00 PPM	Y	/	
F00367	82A062005	14	ACROSS FROM PROVOST MARSHALL	POLE	939	WESTINGHOUSE	25	2.00 PPM	Y	/	
F00368	82A062002	14	ACROSS FROM PROVOST MARSHALL	POLE	939	WESTINGHOUSE	25	2.00 PPM	Y	/	
F00369	3118279	14	ACROSS FROM PROVOST MARSHALL	POLE	0	WESTINGHOUSE	5	43.00 PPM	Y	/	
F00370	M273432YHMA	14	REAR PROVOST MARSHALL	POLE	0	G.E.	25	2.00 PPM	Y	/	
F00371	6414137	5	MUSEUM	PAD	0	G.E.	25	554.00 PPM	N	03/09/92	FD0142
F00372	6414037	5	MUSEUM	PAD	0	G.E.	25	556.00 PPM	N	03/09/92	FD0143
F00373	6414043	5	MUSEUM	PAD	0	G.E.	25	443.00 PPM	N	03/09/92	FD0144
F00374	L657189	1015	VERBECK HOUSING	POLE	1820	WAGNER	10	2.00 PPM	Y	/	
F00375	C667245	1015	VERBECK HOUSING	POLE	1820	WAGNER	10	2.00 PPM	Y	/	
F00376	L67191	1015	VERBECK HOUSING	POLE	1820	WAGNER	10	2.00 PPM	Y	/	
F00377	E962402	1013	VERBECK HOUSING AREA	POLE	822	WAGNER	25	2.00 PPM	Y	/	
F00378	E962403	1013	VERBECK HOUSING AREA	POLE	822	WAGNER	25	2.00 PPM	Y	/	
F00379	87A343520	1013	VERBECK HOUSING AREA	POLE	822	WESTINGHOUSE	25	2.00 PPM	Y	/	
F00380	H5G1668	1019	VERBECK HOUSING	POLE	1824	WAGNER	15	2.00 PPM	Y	/	

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0381	H5G1524	1019	VERBECK HOUSING	POLE	1824	WAGNER	15	2.00 PPM	Y	/	/
FD0382	H5G1543	1019	VERBECK HOUSING AREA	POLE	1824	WAGNER	15	2.00 PPM	Y	/	/
FD0383	2334602001	1019	VERBECK HOUSING REAR	POLE	3704	PRECISION	37.5	37.00 PPM	Y	/	/
FD0384	2334602003	1019	VERBECK HOUSING REAR	PAD	3704	PRECISION	37.5	37.00 PPM	Y	/	/
FD0385	2334602002	1019	VERBECK HOUSING AREA	POLE	3704	PRECISION	37.5	34.00 PPM	Y	/	/
FD0386	J6G7589	1019	VERBECK HOUSING	POLE	1824	WAGNER	5	2.00 PPM	Y	/	/
FD0387	2334601003	1002	VERBECK HOUSING	POLE	1827	PRECISION	25	36.00 PPM	Y	/	/
FD0388	2334601004	1002	VERBECK HOUSING	POLE	1827	PRECISION	25	38.00 PPM	Y	/	/
FD0389	2334601008	1002	VERBECK HOUSING	POLE	1827	PRECISION	25	36.00 PPM	Y	/	/
FD0390	2334601001	1001	VERBECK HOUSING AREA	POLE	1828	PRECISION	25	35.00 PPM	Y	/	/
FD0391	2334601002	1001	VERBECK HOUSING AREA	POLE	1828	PRECISION	25	35.00 PPM	Y	/	/
FD0392	2334601005	1001	VERBECK HOUSING	POLE	1828	PRECISION	25	38.00 PPM	Y	/	/
FD0393	J5G1537	1003	VERBECK HOUSING	POLE	1834	WAGNER	15	2.00 PPM	Y	/	/
FD0394	J5G1511	1003	VERBECK HOUSING	POLE	1834	WAGNER	15	2.00 PPM	Y	/	/
FD0395	K5G1214	1003	VERBECK HOUSING	POLE	1834	WAGNER	15	2.00 PPM	Y	/	/
FD0396	D9C1345	1835	VERBECK HOUSING	POLE	1835	WAGNER	25	2.00 PPM	Y	/	/
FD0397	L9G2392	1003	VERBECK HOUSING	POLE	1835	WAGNER	25	2.00 PPM	Y	/	/
FD0398	E9G2394	1003	VERBECK HOUSING	POLE	1835	WAGNER	25	2.00 PPM	Y	/	/
FD0399	2334601008	1005	VERBECK HOUSING	POLE	1838	PRECISION	25	38.00 PPM	Y	/	/
FD0400	2334601011	1005	VERBECK HOUSING	POLE	1838	PRECISION	25	39.00 PPM	Y	/	/
FD0401	2334601012	1005	VERBECK HOUSING	POLE	1838	PRECISION	25	38.00 PPM	N	01/07/91	P867967YZE
FD0402	2334601010	1005	VERBECK HOUSING	POLE	1839	PRECISION	25	38.00 PPM	Y	/	/
FD0403	2334601009	1006	VERBECK HOUSING AREA	POLE	1839	PRECISION	25	38.00 PPM	Y	/	/
FD0404	2334601007	1006	VERBECK HOUSING AREA	POLE	1839	PRECISION	25	38.00 PPM	Y	/	/
FD0405	K865800Y73AA	0	ANTIETAM & AUMAN	POLE	855	G.E.	75	2.00 PPM	Y	/	/
FD0406	K838599Y72AA	0	ANTIETAM & AUMAN	POLE	855	G.E.	75	2.00 PPM	Y	/	/
FD0407	K838600Y72AA	0	ANTIETAM & AUMAN	POLE	855	G.E.	75	2.00 PPM	Y	/	/
FD0408	4392810	255	T255 POLE 4327	POLE	4327	POLE STAR	37.5	2.00 PPM	Y	/	/
FD0409	610063110	255	T255 POLE 4327	POLE	4327	POLE STAR	37.5	2.00 PPM	Y	/	/
FD0410	60341012	225	T225 POLE 4327	POLE	4327	POLE STAR	37.5	2.00 PPM	Y	/	/
FD0411	6414144	226	T226 POLE 4317	POLE	4317	G.E.	25	432.00 PPM	Y	/	/
FD0412	7673649	226	T226 POLE 4317	POLE	4317	G.E.	25	446.00 PPM	Y	/	/
FD0413	6414087	226	T226 POLE 4317	POLE	4317	G.E.	25	2.00 PPM	Y	/	/
FD0414	P550507YYC	226	T226 POLE 4316	POLE	4316	G.E.	15	2.00 PPM	Y	/	/
FD0415	N856145YHX	226	T226 POLE 4316	POLE	4316	G.E.	15	2.00 PPM	Y	/	/
FD0416	6911964	226	T226 POLE 4316	POLE	4316	G.E.	15	2.00 PPM	Y	/	/
FD0417	N428663YBUA	222	T222 POLE 848	POLE	848	G.E.	25	2.00 PPM	Y	/	/
FD0418	6366367	222	BLDG T222 POLE 4753	POLE	4753	G.E.	25	90.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0419	6366362	222	BLDG T222 POLE 4753	POLE	4753	G.E.	25	92.00 PPM	Y	/	
FD0420	6559508	222	BLDG T222 POLE 4753	POLE	4753	G.E.	25	92.00 PPM	Y	/	
FD0421	2535246	216	BLDG T216	POLE	843	ALLIS CHALME	15	42.00 PPM	Y	/	
FD0422	2535179	216	BLDG T216 POLE 843	POLE	843	ALLIS CHALME	15	42.00 PPM	Y	/	
FD0423	2535212	216	BLDG T216 POLE 843	POLE	843	ALLIS CHALME	15	44.00 PPM	Y	/	
FD0424	M36488YKNA	213	COOK STREET	POLE	1806	G.E.	25	2.00 PPM	Y	/	
FD0425	M273410YHNA	213	COOK STREET	POLE	1806	G.E.	25	2.00 PPM	Y	/	
FD0426	M273434YHNA	213	COOK STREET	POLE	1806	G.E.	25	2.00 PPM	Y	/	
FD0427	6556073	0	ANTIETAM & COOK	POLE	841	G.E.	25	34.00 PPM	Y	/	
FD0428	6294348	243	COOK STREET	POLE	4310	G.E.	50	398.00 PPM	Y	/	
FD0429	6413990	0	COOK STREET & BUENA VISTA	POLE	0	G.E.	25	449.00 PPM	Y	/	
FD0430	6414131	0	COOK STREET & BUENA VISTA	POLE	0	G.E.	25	439.00 PPM	Y	/	
FD0431	6414030	0	COOK STREET & BUENA VISTA	POLE	0	G.E.	25	447.00 PPM	Y	/	
FD0432	6562745	227	BUENA VISTA ST	POLE	4320	G.E.	25	555.00 PPM	N	04/08/92	FD0121
FD0433	6812559	130	BUENA VISTA	POLE	4339	G.E.	15	80.00 PPM	Y	/	
FD0434	2838444	152	ADAMS CIRCLE	POLE	990	WESTINGHOUSE	25	2.00 PPM	Y	/	
FD0435	C519559	153	ADAMS CIRCLE	POLE	1778	G.E.	37.5	80.00 PPM	Y	/	
FD0436	C461143	157	ADAMS CIRCLE	POLE	1874	G.E.	25	114.00 PPM	Y	/	
FD0437	1940036	163	ADAMS CIRCLE	POLE	1879	LINE MATERIA	25	2.00 PPM	Y	/	
FD0438	8000186	163	ADAMS CIRCLE	POLE	1879	LINE MATERIA	25	2.00 PPM	Y	/	
FD0439	8000197	163	ADAMS CIRCLE	POLE	1879	LINE MATERIA	25	2.00 PPM	Y	/	
FD0440	1933730	165	ADAMS CIRCLE	POLE	1881	LINE MATERIA	15	2.00 PPM	Y	/	
FD0441	1940714	165	ADAMS CIRCLE	POLE	1881	LINE MATERIA	15	2.00 PPM	Y	/	
FD0442	1928395	165	ADAMS CIRCLE	POLE	1881	LINE MATERIA	15	2.00 PPM	Y	/	
FD0443	6414114	1474	ADAMS CIRCLE	POLE	2098	G.E.	25	60.00 PPM	Y	/	
FD0444	6414017	1474	ADAMS CIRCLE	POLE	2098	G.E.	25	59.00 PPM	Y	/	
FD0445	6414099	1474	ADAMS CIRCLE	POLE	2098	G.E.	25	64.00 PPM	Y	/	
FD0446	K197278Y71AA	1473	ADAMS CIRCLE	POLE	3000	G.E.	25	2.00 PPM	Y	/	
FD0447	K151687Y71AA	1473	ADAMS CIRCLE	POLE	3000	G.E.	25	2.00 PPM	Y	/	
FD0448	K197277Y71AA	1473	ADAMS CIRCLE	POLE	3000	G.E.	25	2.00 PPM	Y	/	
FD0449	6414039	1460	BLDG 1460 POLE 4826	POLE	4826	G.E.	25	57.00 PPM	Y	/	
FD0450	6414063	1453	BLDG 1453 POLE 904	POLE	904	G.E.	25	64.00 PPM	Y	/	
FD0451	C555950	1450	BLDG 1450 POLE 901	POLE	901	G.E.	50	65.00 PPM	Y	/	
FD0452	20070	1467	DAKOTA	POLE	4725	UPTGRAFF	25	2.00 PPM	Y	/	
FD0453	19870	1467	DAKOTA	POLE	4725	UPTGRAFF	25	2.00 PPM	Y	/	
FD0454	M273420YHNA	1467	DAKOTA	POLE	4725	G.E.	25	2.00 PPM	Y	/	
FD0455	6221113	1463	DAKOTA & BUENA VISTA	POLE	4820	POLE STAR	50	2.00 PPM	Y	/	
FD0456	D28030858P	1463	DAKOTA	POLE	4835	G.E.	50	145.00 PPM	Y	/	

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0457	D28027958P	1463	DAKOTA & BUENA VISTA	POLE	4835	G.E.	50	141.00 PPM	Y	/	/
FD0458	D27955758P	1463	DAKOTA & BUENA VISTA	POLE	4835	G.E.	50	140.00 PPM	Y	/	/
FD0459	6414045	3528	BLDG T3528 POLE 3379	POLE	3379	G.E.	25	460.00 PPM	Y	/	/
FD0460	6414116	3538	DAKOTA ST.	POLE	3380	G.E.	25	395.00 PPM	Y	/	/
FD0461	6414143	3546	DAKOTA & CAHEY	POLE	1234	G.E.	25	428.00 PPM	Y	/	/
FD0462	6414001	3550	DAKOTA	POLE	1238	G.E.	25	420.00 PPM	Y	/	/
FD0463	6413996	3541	DAKOTA	POLE	3375	G.E.	25	344.00 PPM	Y	/	/
FD0464	6414065	3546	CAHEY ST.	POLE	0	G.E.	25	416.00 PPM	Y	/	/
FD0465	K702497Y72AA	3586	FEINBERG	POLE	4720	G.E.	15	2.00 PPM	Y	/	/
FD0466	K702496Y72AA	3586	FEINBERG	POLE	4720	G.E.	15	2.00 PPM	Y	/	/
FD0467	K688661Y72A	3586	FEINBERG	POLE	4720	G.E.	15	2.00 PPM	Y	/	/
FD0468	87105329	2017	FEINBERG	POLE	2012	RTE	25	2.00 PPM	Y	/	/
FD0469	871055328	2017	FEINBERG	POLE	2012	RTE	25	2.00 PPM	Y	/	/
FD0470	871055327	2017	FEINBERG	POLE	2012	RTE	25	2.00 PPM	Y	/	/
FD0471	N062979YCSA	3587	FEINBERG	POLE	2013	G.E.	15	2.00 PPM	Y	/	/
FD0472	M980417YHRA	3587	FEINBERG	POLE	2013	G.E.	15	2.00 PPM	Y	/	/
FD0473	N062978YCSA	3587	FEINBERG	POLE	2013	G.E.	15	2.00 PPM	Y	/	/
FD0474	642764382	3574	FEINBERG	POLE	2014	HOWARD	15	2.00 PPM	Y	/	/
FD0475	642744382	3574	FEINBERG	POLE	2014	HOWARD	15	2.00 PPM	Y	/	/
FD0476	642754382	3574	FEINBERG	POLE	2014	HOWARD	15	2.00 PPM	Y	/	/
FD0477	6414022	3574	FEINBERG	POLE	3374	G.E.	25	257.00 PPM	Y	/	/
FD0478	P624195YRD	1454	BUENA VISTA	POLE	905	G.E.	25	2.00 PPM	Y	/	/
FD0479	P624196YRD	1454	BUENA VISTA	POLE	905	G.E.	25	2.00 PPM	Y	/	/
FD0480	P624194YRD	1454	BUENA VISTA	POLE	905	G.E.	25	2.00 PPM	Y	/	/
FD0481	P643726YTD	1456	BUENA VISTA	POLE	909	G.E.	15	2.00 PPM	Y	/	/
FD0482	1864939	1456	BUENA VISTA	POLE	909	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0483	1864927	1456	BUENA VISTA	POLE	909	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0484	1864943	1456	BUENA VISTA	POLE	909	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0485	6413944	1456	BUENA VISTA	POLE	5095	G.E.	25	151.00 PPM	Y	/	/
FD0486	6413972	1456	BUENA VISTA	POLE	5095	G.E.	25	146.00 PPM	Y	/	/
FD0487	6413977	1456	BUENA VISTA	POLE	5095	G.E.	25	145.00 PPM	Y	/	/
FD0488	6294946	1650	BUENA VISTA	POLE	9000	G.E.	50	164.00 PPM	Y	/	/
FD0489	1250548	1643	BUENA VISTA	POLE	1643	MOLONEY	37.5	89.00 PPM	Y	/	/
FD0490	89A332056	1632	ANTIETAM	POLE	305	WESTINGHOUSE	50	2.00 PPM	Y	/	/
FD0491	64134971	1646	BUENA VISTA	POLE	3046	G.E.	25	74.00 PPM	Y	/	/
FD0492	6413927	1646	BUENA VISTA	POLE	3	G.E.	25	80.00 PPM	Y	/	/
FD0493	6414128	1646	BUENA VISTA	POLE	3046	G.E.	25	90.00 PPM	Y	/	/
FD0494	1884261	142	BUENA VISTA	POLE	982	LINE MATERIA	25	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0495	1884258	142	BUENA VISTA	POLE	982	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0496	1884266	142	BUENA VISTA	POLE	982	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0497	1709751	0	BUENA VISTA HOUSING AREA	POLE	986	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0498	1709745	0	BUENA VISTA	POLE	986	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0499	1709753	0	BUENA VISTA HOUSING AREA	POLE	986	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0500	C461149	147	BUENA VISTA HOUSING	POLE	987	G.E.	25	136.00 PPM	Y	/	/
FD0501	C553172	1622	DEH BLVD.	POLE	3055	G.E.	50	96.00 PPM	Y	/	/
FD0502	6671007	1633	ANTIETAM & COLD HARBOR	POLE	3023	G.E.	5	111.00 PPM	Y	/	/
FD0503	73AF17903	1435	ANTIETAM ST.	POLE	812	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0504	75AG12575	0	ANTIETAM ST.	POLE	812	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0505	75AG12586	1435	ANTIETAM ST.	POLE	812	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0506	2769531	1435	ANTIETAM	POLE	2065	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0507	6413958	1436	ANTIETAM	POLE	0	G.E.	25	441.00 PPM	Y	/	/
FD0508	P059581YOA	1422	CHATTANOOGA DEH YARD	POLE	0	G.E.	25	2.00 PPM	Y	/	/
FD0509	C55596058P	1426	DEH COMPOUND	POLE	2081	G.E.	50	63.00 PPM	Y	/	/
FD0510	6372434	1416	DEH COMPOUND	POLE	2083	G.E.	15	469.00 PPM	Y	/	/
FD0511	6372432	1416	DEH COMPOUND	POLE	2083	G.E.	15	474.00 PPM	Y	/	/
FD0512	6372419	1416	DEH COMPOUND	POLE	2083	G.E.	15	474.00 PPM	Y	/	/
FD0513	89466	1618	DEH BLVD.	POLE	3066	MARCUS	15	2.00 PPM	Y	/	/
FD0514	89467	1627	DEH BLVD.	POLE	3066	MARCUS	15	2.00 PPM	Y	/	/
FD0515	89465	1527	DEH BLVD	POLE	3066	MARCUS	15	2.00 PPM	Y	/	/
FD0516	68J4656	1693	CAVITE ST.	POLE	971	WESTINGHOUSE	30	47.00 PPM	Y	/	/
FD0517	6566720	1693	CAVITE ROAD	POLE	970	G.E.	25	257.00 PPM	Y	/	/
FD0518	641155	1413	CAVITE ST.	POLE	968	G.E.	25	437.00 PPM	Y	/	/
FD0519	J533946Y70A	1425	CAVITE ST.	POLE	770	G.E.	15	2.00 PPM	Y	/	/
FD0520	H651642Y68	1425	CAVITE ST.	POLE	770	G.E.	15	2.00 PPM	Y	/	/
FD0521	H650362Y68	1425	CAVITE ST.	POLE	770	G.E.	15	2.00 PPM	Y	/	/
FD0522	346531	1401	CAVITE ST.	POLE	776	CENTRAL	10	2.00 PPM	Y	/	/
FD0523	63A12787	1400	CAVITE ST.	POLE	783	WESTINGHOUSE	37.5	65.00 PPM	Y	/	/
FD0524	6385655	1400	CAVITE ST.	POLE	783	WESTINGHOUSE	37.5	63.00 PPM	Y	/	/
FD0525	6385657	1400	CAVITE	POLE	783	WESTINGHOUSE	37.5	64.00 PPM	Y	/	/
FD0526	62AL5238	1400	CAVITE	POLE	786	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0527	62AL5224	1400	CAVITE	POLE	786	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0528	62AL6021	1400	CAVITE	POLE	786	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0529	514482	1400	CAVITE ST.	POLE	4272	G.E.	15	2.00 PPM	Y	/	/
FD0530	5J44829	1400	CAVITE	POLE	4273	WAGNER	15	2.00 PPM	Y	/	/
FD0531	5J35843	1400	CAVITE ST.	POLE	4273	WAGNER	15	2.00 PPM	Y	/	/
FD0532	321211	1400	CAVITE	POLE	4272	CENTRAL	15	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0533	2718135	201	CAVITE ST. & CAREY	POLE	1905	WESTINGHOUSE	5	2.00 PPM	N	06/18/91	FD0316
FD0534	M279316YHNA	207	CAREY ST.	PAD	0	G.E.	37.5	2.00 PPM	Y	/	/
FD0535	M279310YHAA	201	CAREY INSIDE VAULT	PAD	0	G.E.	37.5	2.00 PPM	Y	/	/
FD0536	M2807814YHNA	202	CAREY ST. INSIDE VAULT	PAD	0	G.E.	37.5	2.00 PPM	Y	/	/
FD0537	2828316	203	CAREY	POLE	4266	WESTINGHOUSE	10	17.00 PPM	N	03/04/92	NOT REPLACED
FD0538	2769856	1608	CAREY ST.	POLE	3031	WESTINGHOUSE	25	19.00 PPM	Y	/	/
FD0539	6414126	1674	CAREY ST.	POLE	3028	G.E.	25	391.00 PPM	Y	/	/
FD0540	6413965	1672	CAREY ST.	POLE	1889	G.E.	25	393.00 PPM	Y	/	/
FD0541	3049646	1407	CAREY REAR	POLE	1915	WESTINGHOUSE	10	2.00 PPM	Y	/	/
FD0542	63AK7743	1411	CAREY ST.	POLE	1921	WESTINGHOUSE	10	2.00 PPM	Y	/	/
FD0543	C475831	246	ANTIETAM & CAREY	POLE	834	G.E.	15	36.00 PPM	Y	/	/
FD0544	C687839	246	ANTIETAM CARY	POLE	834	G.E.	15	37.00 PPM	Y	/	/
FD0545	9900698	246	ANTIETAM & CARY	POLE	834	G.E.	15	36.00 PPM	Y	/	/
FD0546	3118282	250	ANTIETAM	POLE	838	WESTINGHOUSE	5	30.00 PPM	Y	/	/
FD0547	2768083	1669	ANTIETAM	POLE	3040	WESTINGHOUSE	25	12.00 PPM	Y	/	/
FD0548	P549984YYC	1659	ANTIETAM & CAREY	POLE	3043	G.E.	25	2.00 PPM	Y	/	/
FD0549	6413978	240	BUENA VISTA	POLE	4879	G.E.	25	261.00 PPM	Y	/	/
FD0550	2768084	236	BUENA VISTA	POLE	4876	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0551	P649106YTD	233	BUENA VISTA	POLE	4883	G.E.	15	2.00 PPM	Y	/	/
FD0552	6812555	237	BUENA VISTA	POLE	4876	G.E.	15	292.00 PPM	Y	/	/
FD0553	682443	237	BUENA VISTA	POLE	4876	G.E.	15	291.00 PPM	Y	/	/
FD0554	1947690	237	BUENA VISTA	POLE	4876	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0555	62268915	96	BUENA VISTA	POLE	919	POLE STAR	25	2.00 PPM	Y	/	/
FD0556	622589116	1696	BUENA VISTA & SHORT	POLE	919	POLE STAR	25	2.00 PPM	Y	/	/
FD0557	22589115	1696	BUENA VISTA & SHORT	POLE	919	POLE STAR	25	2.00 PPM	Y	/	/
FD0558	H718982Y68A	1696	BUENA VISTA	POLE	918	G.E.	50	2.00 PPM	Y	/	/
FD0559	H700288Y68A	1696	BUENA VISTA	POLE	918	G.E.	50	2.00 PPM	Y	/	/
FD0560	H719984Y68A	1696	BUENA VISTA CAVITE	POLE	918	G.E.	50	2.00 PPM	Y	/	/
FD0561	J601733Y70AA	1616	ANTIETAM	POLE	826	G.E.	37.5	2.00 PPM	Y	/	/
FD0562	J588382Y470A	1616	ANTIETAM	POLE	826	G.E.	37.5	2.00 PPM	Y	/	/
FD0563	J605049Y70AA	1661	ANTIETAM	POLE	826	G.E.	37.5	2.00 PPM	Y	/	/
FD0564	1933748	1427	DAKOTA & PATTON	POLE	646	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0565	1933747	1427	DAKOTA & PATTON	POLE	646	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0566	1933746	1427	DAKOTA & PATTON	POLE	646	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0567	63344614	3711	DAKOTA	POLE	669	POLE STAR	15	2.00 PPM	Y	/	/
FD0568	66265	3711	DAKOTA	POLE	669	HARRISON	15	2.00 PPM	Y	/	/
FD0569	66270	3711	DAKOTA	POLE	669	HARRISON	15	2.00 PPM	Y	/	/
FD0570	M856144YMK	3701	DAKOTA	POLE	0	G.E.	15	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

Page No. 16
10/19/92

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0571	C490291	3712	DAKOTA COMMISSARY	POLE	3523	G.E.	50	117.00 PPM	N	04/22/91	NOT REPLACED
FD0572	C524868	3712	DAKOTA COMMISSARY	POLE	3532	G.E.	50	195.00 PPM	N	04/22/91	NOT REPLACED
FD0573	C524867	3712	DAKOTA COMMISSARY	POLE	3532	G.E.	50	183.00 PPM	N	04/22/91	NOT REPLACED
FD0574	2768090	3713	DAKOTA ST	POLE	3505	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0575	6414146	3713	DAKOTA ST	POLE	3505	G.E.	25	438.00 PPM	Y	/	/
FD0576	6413964	3713	DAKOTA ST.	POLE	3505	G.E.	25	453.00 PPM	Y	/	/
FD0577	856146YMX	0	DAKOTA BLDG ACROSS FROM COMM.	POLE	0	G.E.	15	2.00 PPM	Y	/	/
FD0578	6880430	3758	DAKOTA	POLE	499	G.E.	25	2.00 PPM	Y	/	/
FD0579	6414064	3758	DAKOTA	POLE	499	G.E.	25	202.00 PPM	Y	/	/
FD0580	6880452	3758	DAKOTA	POLE	499	G.E.	25	2.00 PPM	Y	/	/
FD0581	6413928	3757	DAKOTA STREET	POLE	686	G.E.	25	339.00 PPM	Y	/	/
FD0582	6414003	3757	DAKOTA ST	POLE	686	G.E.	25	337.00 PPM	Y	/	/
FD0583	6414133	3757	DAKOTA	POLE	686	G.E.	25	2.00 PPM	Y	/	/
FD0584	N652833	3775	DAKOTA ST.	POLE	0	G.E.	167	2.00 PPM	Y	/	/
FD0585	N652832	3776	DAKOTA	POLE	0	G.E.	167	2.00 PPM	Y	/	/
FD0586	N652834	3775	DAKOTA ST.	POLE	0	G.E.	167	2.00 PPM	Y	/	/
FD0587	72AK16321	0	DAKOTA STREET NATIONAL GUARD	POLE	0	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0588	72AK16341	0	DAKOTA STREET NATIONAL GUARD	POLE	0	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0589	72AK16323	0	DAKOTA STREET NATIONAL GUARD	POLE	0	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0590	P600878-YPD	0	DAKOTA-BACK GATE NAT GUARD	POLE	3	G.E.	15	2.00 PPM	Y	/	/
FD0591	63AG279	3769	DAKOTA NATIONAL GUARD	POLE	4483	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0592	63AG1151	3769	DAKOTA ST. NATIONAL GUARD	POLE	4483	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0593	63AG3247	3769	DAKOTA ST. NATIONAL GUARD	POLE	4483	WESTINGHOUSE	25	2.00 PPM	Y	/	/
FD0594	6414125	3752	DAKOTA ST. NATIONAL GUARD	POLE	3494	G.E.	25	549.00 PPM	N	11/05/91	FD0219
FD0595	NO-NAMEPLATE	3768	DAKOTA NATIONAL GUARD	PAO	4457	G.E.	100	2.00 PPM	Y	/	/
FD0596	L823196YDLA	3768	DAKOTA ST NATIONAL GUARD	PAO	4457	G.E.	100	2.00 PPM	Y	/	/
FD0597	L861755YDLA	3768	DAKOTA ST NATIONAL GUARD	POLE	4457	G.E.	100	2.00 PPM	Y	/	/
FD0598	6414095	3768	DAKOTA ST NATIONAL GUARD	POLE	4462	G.E.	25	570.00 PPM	N	03/04/92	FD0138
FD0599	6559513	3708	DAKOTA ST NATIONAL GUARD	POLE	4466	G.E.	25	453.00 PPM	Y	/	/
FD0600	P524974YXC	3704	DAKOTA ST NATIONAL GUARD	POLE	0	G.E.	25	2.00 PPM	Y	/	/
FD0601	P549986YXC	3704	DAKOTA ST. NATIONAL GUARD	POLE	0	G.E.	25	2.00 PPM	Y	/	/
FD0602	P317867-YVB	3704	DAKOTA ST	POLE	0	G.E.	25	2.00 PPM	Y	/	/
FD0603	1832516	3713	REAR DAKOTA STREET	POLE	3534	G.E.	5	2.00 PPM	N	04/14/92	NOT REPLACED
FD0604	6957996	0	DAKOTA ST. BEHIND COMMISSARY	POLE	5347	G.E.	15	1048.00 PPM	N	05/20/91	NOT REPLACED
FD0605	1946708	410	DAVAO CIRCLE HOUSING	POLE	1755	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0606	1946703	410	DAVAO CIRCLE HOUSING	POLE	1755	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0607	1946704	410	DAVAO CIRCLE	POLE	1755	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0608	1947721	413	DAVAO HOUSING	POLE	1770	LINE MATERIA	15	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0609	1947746	413	DAVAO HOUSING	POLE	1770	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0610	1947627	413	DAVAO CIRCLE HOUSING	POLE	1770	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0611	8000125	404	DAVAO HOUSING	POLE	1766	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0612	8000187	404	DAVAO HOUSING	POLE	1766	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0613	8000191	404	DAVAO HOUSING	POLE	1766	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0614	1947728	405	DAVAO HOUSING AREA	POLE	1764	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0615	1947695	405	DAVAO HOUSING AREA	POLE	1764	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0616	1947720	405	DAVAO HOUSING AREA	POLE	1764	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0617	1947740	407	DAVAO CIRCLE	POLE	1761	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0618	1947722	407	DAVAO HOUSING AREA	POLE	1761	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0619	1947707	407	DAVAO HOUSING AREA	POLE	1761	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0620	1947745	409	DAVAO CIRCLE	POLE	1759	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0621	1947691	409	DAVAO CIRCLE HOUSING	POLE	1759	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0622	1947705	409	DAVAO CIRCLE	POLE	1759	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0623	1947788	411	DAVAO HOUSING AREA	POLE	1757	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0624	1947708	411	DAVAO CIRCLE	POLE	1757	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0625	1947704	411	DAVAO CIRCLE HOUSING	POLE	1757	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0626	1947857	417	DAVAO HOUSING	POLE	1748	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0627	1947664	417	DAVAO HOUSING	POLE	1748	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0628	1946103	417	DAVAO HOUSING	POLE	1748	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0629	1946107	422	DAVAO HOUSING	POLE	1746	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0630	1946104	422	DAVAO HOUSING	POLE	1746	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0631	1946108	422	DAVAO CIRCLE	POLE	1746	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0632	73AE5233	1489	PATTON-SHOPPETTE	POLE	631	WESTINGHOUSE	45	2.00 PPM	Y	/	/
FD0633	P643728YTD	3660	MAGAZINE AREA	POLE	4201	G.E.	15	2.00 PPM	Y	/	/
FD0634	66280	0	MAGAZINE AREA PATTON RD.	POLE	4186	HARRISON	15	2.00 PPM	Y	/	/
FD0635	66251	3660	MAGAZINE AREA PATTON RD	POLE	4186	HARRISON	15	2.00 PPM	Y	/	/
FD0636	66253	3660	MAGAZINE AREA PATTON	POLE	4186	HARRISON	15	2.00 PPM	Y	/	/
FD0637	C242238	3630	PATTON WATER	POLE	4862	G.E.	37.5	134.00 PPM	Y	/	/
FD0638	C242239	3630	PATTON WATER	POLE	4862	G.E.	37.5	118.00 PPM	Y	/	/
FD0639	C424391	3630	PATTON WATER	POLE	4862	G.E.	37.5	113.00 PPM	Y	/	/
FD0640	1597707	0	CORNER OF PATTON & MARNE	POLE	1728	LINE MATERIA	5	2.00 PPM	Y	/	/
FD0641	1946118	778	SHILOH HOUSING 1704	POLE	1708	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0642	1958052	778	SHILOH HOUSING	POLE	1704	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0643	1946110	778	SHILOH HOUSING	POLE	1704	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0644	1946113	781	SHILOH HOUSING	POLE	1700	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0645	1939331	781	SHILOH HOUSING	POLE	1700	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0646	1946117	781	SHILOH HOUSING	POLE	1700	LINE MATERIA	25	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

Page No. 18
10/19/92

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0647	1864942	272	SHILOH HOUSING	POLE	1712	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0648	1864928	772	SHILOH HOUSING AREA	POLE	1712	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0649	1864938	772	SHILOH HOUSING	POLE	1712	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0650	8000181	756	SALERNO HOUSING	POLE	1598	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0651	8000189	756	SALERNO HOUSING	POLE	1598	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0652	8000178	756	SALERNO HOUSING	POLE	1598	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0653	8000179	758	SALERNO HOUSING	POLE	1601	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0654	8000195	758	SALERNO HOUSING	POLE	1601	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0655	8000188	758	SALERNO HOUSING	POLE	1601	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0656	1928389	710	SALERNO HOUSING	POLE	1661	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0657	1929707	710	SALERNO HOUSING	POLE	1661	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0658	1928711	710	SALERNO HOUSING	POLE	1661	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0659	1927172	711	SALERNO HOUSING	POLE	1660	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0660	1927161	711	SALERNO HOUSING	POLE	1660	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0661	1928392	711	SALERNO HOUSING	POLE	1660	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0662	8001198	712	SALERNO HOUSING	POLE	1567	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0663	8001199	712	SALERNO HOUSING	POLE	1657	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0664	8000177	712	SALERNO HOUSING	POLE	1657	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0665	1946116	714	SALERNO HOUSING	POLE	1651	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0666	1946108	714	SALERNO HOUSING	POLE	1651	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0667	1946115	714	SALERNO HOUSING	POLE	1651	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0668	1947737	765	SALERNO HOUSING	POLE	1651	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0669	1947738	765	SALERNO HOUSING	POLE	1651	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0670	1947723	765	SALERNO HOUSING	POLE	1651	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0671	1947689	766	SALERNO HOUSING	POLE	1692	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0672	1947706	766	SALERNO HOUSING	POLE	1692	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0673	1947730	766	SALERNO HOUSING	POLE	1692	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0674	1947719	715	SALERNO HOUSING	POLE	1646	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0675	1947709	715	SALERNO HOUSING	POLE	1646	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0676	1947702	715	SALERNO HOUSING	POLE	1646	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0677	8000173	709	SALERNO HOUSING	POLE	1604	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0678	8001197	709	SALERNO HOUSING	POLE	1604	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0679	8000176	709	SALERNO HOUSING	POLE	1604	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0680	B1348707	708	SALERNO HOUSING	POLE	1608	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0681	B1348701	708	SALERNO HOUSING	POLE	1608	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0682	B1348705	708	SALERNO HOUSING	POLE	1608	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0683	8000175	706	SALERNO HOUSING	POLE	1612	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0684	8001193	706	SALERNO HOUSING	POLE	1612	LINE MATERIA	15	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0685	8000170	706	SALERNO HOUSING	POLE	1612	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0686	1882804	704	SALERNO HOUSING	POLE	1615	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0687	1882803	704	SALERNO HOUSING	POLE	1615	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0688	1947716	704	SALERNO HOUSING	POLE	1615	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0689	8000169	703	SALERNO HOUSING	POLE	1617	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0690	8001201	703	SALERNO HOUSING	POLE	1617	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0691	66281	703	SALERNO HOUSING	POLE	1617	HARRISON	15	2.00 PPM	Y	/	/
FD0692	66282	702	SALERNO HOUSING	POLE	1619	HARRISON	15	2.00 PPM	Y	/	/
FD0693	66284	702	SALERNO	POLE	1619	HARRISON	15	2.00 PPM	Y	/	/
FD0694	8001164	702	SALERNO	POLE	1619	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0695	1928415	731	SALERNO HOUSING	POLE	1669	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0696	1940715	731	SALERNO HOUSING	POLE	1669	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0697	1927169	731	SALERNO HOUSING	POLE	1669	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0698	1940716	741	SALERNO HOUSING	POLE	1670	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0699	1940711	741	SALERNO HOUSING	POLE	1670	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0700	1933737	741	SALERNO HOUSING	POLE	1670	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0701	1946706	742	SALERNO HOUSING	POLE	1672	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0702	1946707	742	SALERNO HOUSING	POLE	1672	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0703	1946713	742	SALERNO HOUSING	POLE	1672	LINE MATERIA	10	2.00 PPM	Y	/	/
FD0704	1940712	726	SALERNO HOUSING	POLE	1622	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0705	1940708	726	SALERNO HOUSING	POLE	1622	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0706	1927168	726	SALERNO HOUSING	POLE	1622	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0707	1946111	700	SALERNO HOUSING	POLE	1625	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0708	1940033	700	SALERNO	POLE	1625	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0709	1946105	700	SALERNO HOUSING	POLE	1625	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0710	1958050	722	SALERNO HOUSING	POLE	1629	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0711	8000182	722	SALERNO HOUSING	POLE	1629	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0712	1958053	722	SALERNO HOUSING	POLE	1629	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0713	1947739	748	SALERNO HOUSING	POLE	1632	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0714	1870751	748	SALERNO HOUSING	POLE	1632	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0715	1882792	748	SALERNO HOUSING	POLE	1632	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0716	8000171	720	SALERNO HOUSING	POLE	1635	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0717	8000174	720	SALERNO HOUSING	POLE	1635	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0718	8000172	720	SALERNO HOUSING	POLE	1635	LINE MATERIA	15	2.00 PPM	Y	/	/
FD0719	8000192	719	SALERNO HOUSING	POLE	1638	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0720	1940870	719	SALERNO HOUSING	POLE	1638	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0721	8000183	0	SALERNO HOUSING	POLE	1638	LINE MATERIA	25	2.00 PPM	Y	/	/
FD0722	1940034	716	SALERNO HOUSING	POLE	1641	LINE MATERIA	25	2.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0723	1940035	716	SALERNO HOUSING	POLE	1641	LINE MATERIA	25	2.00 PPM	Y	/	
FD0724	1939327	716	SALERNO HOUSING	POLE	1641	LINE MATERIA	25	2.00 PPM	Y	/	
FD0725	63AK7757	0	ANZIO STREET	POLE	1570	WESTINGHOUSE	10	2.00 PPM	Y	/	
FD0726	PSG0525	1420	DEH ELECTRIC SHOP STORAGE	PAD	0	BALTEAU STAN	300	2.00 PPM	Y	/	
FD0727	64AJ7220	1402	SAROTOGA ST	POLE	4864	WESTINGHOUSE	37.5	2.00 PPM	Y	/	
FD0728	64AK443	1402	SARATOGA ST.	POLE	4864	WESTINGHOUSE	37.5	2.00 PPM	Y	/	
FD0729	64AJ8819	0	SARATOGA STREET	POLE	4864	WESTINGHOUSE	37.5	2.00 PPM	Y	/	
FD0730	N856982YMX	3753	NATIONAL GUARD	POLE	3495	G.E.	25	2.00 PPM	Y	/	
FD0731	P506020TNE	6177	ANTIETAM	PAD	0	G.E.	150	2.00 PPM	Y	/	
FD0732	M337176YJNA	3759	BARNUM ROAD	POLE	0	G.E.	37.5	2.00 PPM	Y	/	
FD0733	89A431232	3706	NATIONAL GUARD AREA	POLE	0	WESTINGHOUSE	37.5	2.00 PPM	Y	/	
FD0734	L316128Y74AA	3770	GROVE POND WELL	POLE	4488	G.E.	50	2.00 PPM	Y	/	
FD0735	129	3770	GROVE POND WELL	POLE	4488	G.E.	50	2.00 PPM	Y	/	
FD0736	L316127Y74AA	3770	GROVE POND WELL	POLE	4488	G.E.	50	2.00 PPM	Y	/	
FD0737	3080166	3713	BARNUM RD	PAD	0	WESTINGHOUSE	100	39.00 PPM	Y	/	
FD0738	3080169	3713	BARNUM RD	PAD	0	WESTINGHOUSE	100	36.00 PPM	Y	/	
FD0739	3080171	3713	BARNUM RD	PAD	0	WESTINGHOUSE	100	33.00 PPM	Y	/	
FD0740	3080094	3713	BARNUM RD	PAD	0	WESTINGHOUSE	100	36.00 PPM	Y	/	
FD0741	3080165	3713	BARNUM RD	PAD	0	WESTINGHOUSE	100	35.00 PPM	Y	/	
FD0742	3080160	3713	BARNUM RD	POLE	0	WESTINGHOUSE	100	34.00 PPM	Y	/	
FD0743	4231277	3713	BARNUM RD COMMISSARY	PAD	0	ESCO	167	107.00 PPM	Y	/	
FD0744	3408A2	3713	BARNUM RD COMMISSARY	PAD	0	EISLER	167	23.00 PPM	Y	/	
FD0745	3408A1	3713	BARNUM RD COMMISSARY	POLE	0	EISLER	167	22.00 PPM	Y	/	
FD0746	D62022957Y	3712	BARNUM RD COMMISSARY	PAD	0	G.E.	100	2.00 PPM	N	04/14/92	NOT REPLACED
FD0747	D620230	3712	BARNUM RD COMMISSARY	PAD	0	G.E.	100	2.00 PPM	N	04/14/92	NOT REPLACED
FD0748	D215966	3712	BARNUM RD COMMISSARY	PAD	0	G.E.	100	557.00 PPM	N	04/14/92	NOT REPLACED
FD0749	75AK10805	1410	DAKOTA ST (NEW COMMISSARY)	POLE	0	WESTINGHOUSE	25	2.00 PPM	Y	/	
FD0750	75AK10303	1410	DAKOTA ST (NEW COMMISSARY)	POLE	0	WESTINGHOUSE	25	2.00 PPM	Y	/	
FD0751	75AK10799	1410	DAKOTA ST (NEW COMMISSARY)	POLE	0	WESTINGHOUSE	25	2.00 PPM	Y	/	
FD0752	N674048	103	AUMAN	PAD	0	G.E.	50	2.00 PPM	Y	/	
FD0753	N673641YLV	2	BUENA VISTA HOUSING	PAD	0	G.E.	75	2.00 PPM	Y	/	
FD0754	N674047YMW	122	BUENA VISTA HOUSING	PAD	0	G.E.	50	2.00 PPM	Y	/	
FD0755	P317866YV8	226	BUENA VISTA ST (IN VAULT)	PAD	0	G.E.	25	2.00 PPM	Y	/	
FD0756	87A301064	226	BUENA VISTA ST (IN VAULT)	PAD	0	WESTINGHOUSE	50	2.00 PPM	Y	/	
FD0757	87A301063	226	BUENA VISTA ST (IN VAULT)	PAD	0	WESTINGHOUSE	50	2.00 PPM	Y	/	
FD0758	87A301062	226	BUENA VISTA ST (IN VAULT)	PAD	0	WESTINGHOUSE	50	2.00 PPM	Y	/	
FD0759	27018	3822	AIRFIELD	POLE	3668	NIAGARA	37.5	2.00 PPM	Y	/	
FD0760	75508	3822	AIRFIELD	POLE	3668	NIAGARA	37.5	2.00 PPM	Y	/	

FORT DEVENS TRANSFORMER DATA

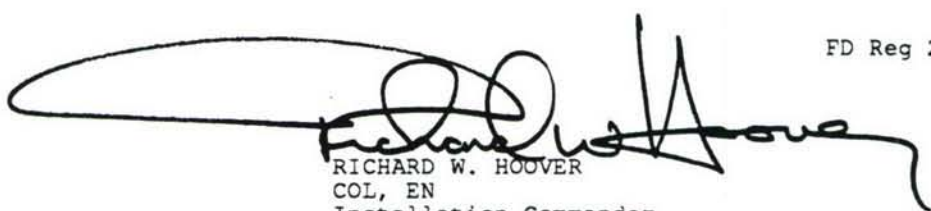
TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0761	27083	3822	AIRFIELD	POLE	3668	NIAGARA	37.5	2.00 PPM	Y	/	/
FD0762	170081N	3822	AIRFIELD	PAD	0	PRECISION	75	33.00 PPM	Y	/	/
FD0763	170062N	3822	AIRFIELD	PAD	0	PRECISION	75	34.00 PPM	Y	/	/
FD0764	170064N	3822	AIRFIELD	PAD	0	PRECISION	75	34.00 PPM	Y	/	/
FD0765	88A041186	3822	AIRFIELD	PAD	0	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0766	88A041187	3822	AIRFIELD	PAD	0	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0767	185	3822	AIRFIELD	PAD	0	WESTINGHOUSE	37.5	2.00 PPM	Y	/	/
FD0768	8053812	3821	AIRFIELD	PAD	0	HEVI DUTY	15	2.00 PPM	Y	/	/
FD0769	8053811	3821	AIRFIELD	PAD	0	HEVI DUTY	15	2.00 PPM	Y	/	/
FD0770	A75781	3821	AIRFIELD	PAD	0	HEVI DUTY	15	2.00 PPM	Y	/	/
FD0771	C566158	3821	AIRFIELD	PAD	0	G.E.	37.5	388.00 PPM	Y	/	/
FD0772	C566838	3821	AIRFIELD	PAD	0	G.E.	37.5	375.00 PPM	Y	/	/
FD0773	C566831	3821	AIRFIELD	PAD	0	G.E.	37.5	388.00 PPM	Y	/	/
FD0801	M123963	3411	LOVELL	PAD	0	G.E.	1000	2.00 PPM	Y	/	/
FD0802	88JF172113	1423	DEH BLDG	PAD	0	WESTINGHOUSE	750	2.00 PPM	Y	/	/
FD0803	860366A1	0	SHERMAN N.C.O CLUB	PAD	0	SQUARE D	500	2.00 PPM	Y	/	/
FD0804	TR000759	0	BALL BLUFF FOOTBALL FIELD	PAD	0	TRANS. SALES	75	2.00 PPM	Y	/	/
FD0805	7097116	27	WEST MAIN ATHLETIC FIELD	POLE	5009	G.E.	10	761.00 PPM	N	05/28/91	NOT REPLACED
FD0806	1728934	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	2000	146.00 PPM	Y	/	/
FD0807	1728933	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	2000	48.00 PPM	Y	/	/
FD0808	1728931	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	2000	47.00 PPM	Y	/	/
FD0809	1728932	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	2000	61.00 PPM	Y	/	/
FD0810	L201738PJL	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	2.00 PPM	Y	/	/
FD0811	L201739PJL	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	92.00 PPM	Y	/	/
FD0812	L201740PJL	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	107.00 PPM	Y	/	/
FD0813	011186	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	34.00 PPM	Y	/	/
FD0814	011185	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	4.00 PPM	Y	/	/
FD0815	011184	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	5.00 PPM	Y	/	/
FD0816	011183	23	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	7.00 PPM	Y	/	/
FD0817	011187	23	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	2.00 PPM	Y	/	/
FD0818	M042837PAN	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	60.00 PPM	Y	/	/
FD0819	M042838PAN	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	84.00 PPM	Y	/	/
FD0820	M042836PAN	23	WEST MAIN MAIN SUB	PAD	0	G.E.	75	86.00 PPM	Y	/	/
FD0821	M042834PAN	23	WEST MAIN MAIN SUB	PAD	0	G.E.	75	13.00 PPM	Y	/	/
FD0822	M809393PPW	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	2.00 PPM	Y	/	/
FD0823	M042835PAN	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	68.00 PPM	Y	/	/
FD0824	M043541PCN	23	WEST MAIN MAIN SUB	PAD	0	G.E.	75	104.00 PPM	Y	/	/
FD0825	M043542PCN	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	63.00 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0826	M043279PCN	33	WEST MAIN	PAD	0	G.E.	75	70.00 PPM	Y	/	/
FD0827	M043546PDN	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	46.00 PPM	Y	/	/
FD0828	M039691PKL	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	61.00 PPM	Y	/	/
FD0829	M039692PKL	33	WEST MAIN MAIN SUB	PAD	0	G.E.	75	56.00 PPM	Y	/	/
FD0830	M810272PHW	23	WEST MAIN MAIN SUB	PAD	0	G.E.	75	2.00 PPM	Y	/	/
FD0831	M810271PHW	23	WEST MAIN MAIN SUB	PAD	0	G.E.	75	2.00 PPM	Y	/	/
FD0832	244254	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	81.00 PPM	Y	/	/
FD0833	244254	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	44.00 PPM	Y	/	/
FD0834	244254	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	30.00 PPM	Y	/	/
FD0835	304762	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	2.00 PPM	Y	/	/
FD0836	304762	33	WEST MAIN MAIN SUB	PAD	0	ALLIS CHALME	NA	2.00 PPM	Y	/	/
FD0837	304762	33	WEST MAIN	PAD	0	ALLIS CHALME	NA	2.00 PPM	Y	/	/
FD0838	85JK527070	13	BUENA VISTA	PAD	0	WESTINGHOUSE	500	2.00 PPM	Y	/	/
FD0839	F63960666P	12	BUENA VISTA	PAD	0	G.E.	500	2.00 PPM	Y	/	/
FD0840	CF0519001	11	BUENA VISTA	PAD	0	ATLANTIC POW	750	2.00 PPM	Y	/	/
FD0841	F63960866P	11	BUENA VISTA	PAD	0	G.E.	225	2.00 PPM	Y	/	/
FD0842	6414050	2537	WATER TANK RD.	POLE	3273	G.E.	25	248.00 PPM	Y	/	/
FD0843	6413968	2432	WATER TANK RD	POLE	3194	G.E.	25	58.00 PPM	Y	/	/
FD0844	H25863468P	695	SHERMAN	PAD	0	G.E.	112.5	2.00 PPM	Y	/	/
FD0845	120074N	3819	AIR FIELD	POLE	3672	PRECISION	10	2.00 PPM	Y	/	/
FD0846	120073N	3819	AIRFIELD	POLE	3672	PRECISION	10	2.00 PPM	Y	/	/
FD0847	120075N	3819	AIRFIELD	POLE	3672	PRECISION	10	2.00 PPM	Y	/	/
FD0848	C70815556P	3800	AIRFIELD	POLE	3673	G.E.	10	24.00 PPM	Y	/	/
FD0849	6372446	3806	AIRFIELD	POLE	3675	G.E.	25	100.00 PPM	Y	/	/
FD0850	130078N	3820	AIRFIELD	POLE	3820	PRECISION	15	2.00 PPM	Y	/	/
FD0851	E37796961P	3839	AIR FIELD	POLE	3679	G.E.	10	368.00 PPM	Y	/	/
FD0852	E3797261P	3839	AIRFIELD	POLE	3679	G.E.	10	368.00 PPM	Y	/	/
FD0853	E377967061P	3839	AIRFIELD	POLE	3679	G.E.	10	372.00 PPM	Y	/	/
FD0854	C223755	3815	AIRFIELD	POLE	3621	G.E.	37.5	64.00 PPM	Y	/	/
FD0855	C221564	3815	AIRFIELD	POLE	3621	G.E.	37.5	59.00 PPM	Y	/	/
FD0856	C223751	3815	AIR FIELD	POLE	3621	G.E.	37.5	65.00 PPM	Y	/	/
FD0857	877N521001	2007	QUEENSTOWN RD	PAD	0	MCGRAW EDISO	225	2.00 PPM	Y	/	/
FD0858	16613	3835	FILTER BED ROAD	POLE	3634	WESTINGHOUSE	7.5	16.50 PPM	Y	/	/
FD0859	3082504	3835	FILTER BED ROAD	POLE	3634	WESTINGHOUSE	7.5	5.56 PPM	Y	/	/
FD0860	271280	3835	FILTER BED ROAD	POLE	3634	LINE MATERIA	5	1.67 PPM	Y	/	/
FD0861	G889577-67Y	3810	McPHERSON ROAD	POLE	0	G.E.	37.5	1.67 PPM	Y	/	/
FD0862	G889579-67Y	3810	McPHERSON ROAD	POLE	0	G.E.	37.5	1.67 PPM	Y	/	/
FD0863	G889578-67Y	3810	McPHERSON ROAD	POLE	0	G.E.	37.5	1.67 PPM	Y	/	/

FORT DEVENS TRANSFORMER DATA

TEST #	SERIAL NUMBER	BLDG	STREET	MOUNT	POLE	MANUFACTURER	KVA	PCB LEVEL	SERVICE?	REMOVED	REPLACED BY
FD0864	56283	0	MCPHERSON ROAD	POLE	3610	DISTRIBUTION	15	1.67 PPM	N	/	
FD0865	3212-2	27	SHERMAN AVENUE	POLE	4430	CENTRAL TRAN	15	6.30 PPM	Y	/	
FD0866	1195216	27	SHERMAN AVENUE	POLE	4430	WESTINGHOUSE	15	16.80 PPM	Y	/	
FD0867	6812600	27	SHERMAN AVENUE	POLE	4430	G.E.	15	4.80 PPM	Y	/	
FD0868	120111N	2516	JACKSON RD (GOLF COURSE PUMP ST)	POLE	5070	PRECISION	10	1.67 PPM	Y	/	
FD0869	120112N	2516	JACKSON RD (GOLF COURSE PUMP ST)	POLE	5070	PRECISION	10	1.67 PPM	Y	/	
FD0870	120110N	2516	JACKSON RD (GOLF COURSE PUMP ST)	POLE	5070	PRECISION	10	1.67 PPM	Y	/	
FD0871	6827981	0	NEAR LANDFILL (NEAR BLDG 264)	POLE	0	G.E.	5	130.00 PPM	Y	11/15/91	NOT REPLACED
FD0872	P718522YTD	73	ELM ST & SHERMAN AVE	POLE	78	G.E.	15	2.00 PPM	Y	/	
FD0873	P649108YTD	2422	QUEENSTOWN ST	POLE	3214	G.E.	25	2.00 PPM	Y	/	



RICHARD W. HOOVER
COL, EN
Installation Commander

DISTRIBUTION:
IAW FD Publications Subscription
System 25-91-1

Appendix C: Transformer Study Protocol

Appendix C: Transformer Study Protocol

Field Protocol for PCB Transformers				
Location:		Transformer ID: _____		
Associated AREEs/Study Areas:				
Fort Devens Personnel Interviewed:				
Amount of Oil Spilled:				
Spill	Ground	Concrete	Asphalt	Other
PCB Concentration:				
Fort Devens Personnel Interviewed:				

Appendix C: Transformer Study Protocol (continued)

Field Protocol for PCB Transformers	
Evidence of: <ul style="list-style-type: none">- Spill- Staining- Stressed vegetation- Odor- Other	
Sample Location (<i>See Drawing</i>):	
Sample ID:	
Sample Type:	
Number of Samples:	
Other Observations (<i>see field notebook</i>):	
Date:	ADL Personnel:
Signed: _____	

Appendix C: Transformer Study Protocol (continued)

Location Drawing

Appendix D: Completed Protocol, AREE 66

Appendix D: Completed Protocol, AREE 66

AREE 66A

Associated AREEs:	N/A
Location:	Building 3752
Transformer ID:	6414125
Amount Spilled:	Not Reported
Spill Surface:	Ground
PCB Concentration:	549 ppm
Other Observations:	Removed from pole September 30, 1992
Name:	Anthony Parkin
Date:	6/16/93

N/A = Not Applicable

Appendix D: Completed Protocol, AREE 66

AREE 66B

Associated AREEs:	AREE 70, Storm Drain System No. 9
Location:	Building 1634
Transformer ID:	N/R
Amount Spilled:	Not Reported
Spill Surface:	Ground
PCB Concentration:	N/R
Other Observations:	Transformer was removed as it was leaking.
Name:	Anthony Parkin
Date:	6/16/93

N/R = Not Reported

Appendix D: Completed Protocol, AREE 66

AREE 66C

Associated AREEs:	N/A
Location:	Building 3657
Transformer ID:	7671845
Amount Spilled:	N/R
Spill Surface:	Asphalt
PCB Concentration:	316 ppm
Other Observations:	Transformer was leaking, but no documentation on if the leak reached the ground
Name:	Anthony Parkin
Date:	6/16/93

N/A = Not Applicable

N/R = Not Reported

Appendix D: Completed Protocol, AREE 66

AREE 66D

Associated AREEs:	N/A
Location:	Building 3575
Transformer ID:	6573226
Amount Spilled:	Approximately 1 pound
Spill Surface:	Grass
PCB Concentration:	N/R
Other Observations:	Soil excavated and placed into 55-gallon drums
Name:	Anthony Parkin
Date:	6/16/93

N/A = Not Applicable

N/R = Not Reported

Appendix D: Completed Protocol, AREE 66

AREE 66E

Associated AREEs:	N/A
Location:	Patton Substation
Transformer ID:	B11472
Amount Spilled:	N/R
Spill Surface:	Concrete
PCB Concentration:	940 ppm
Other Observations:	Patton substation replaced in summer of 1993. Old barrier system at 1989. Numerous reports of leaks.
Name:	Anthony Parkin
Date:	6/16/93

N/A = Not Applicable

N/R = Not Reported

Appendix D: Completed Protocol, AREE 66

AREE 66E

Associated AREEs:	N/A
Location:	Patton
Transformer ID:	3344617
Amount Spilled:	N/R
Spill Surface:	Concrete
PCB Concentration:	940 ppm
Other Observations:	Patton substation replaced in summer of 1993. Old barrier system at 1989. Numerous reports of leaks.
Name:	Anthony Parkin
Date:	6/16/93

N/A = Not Applicable

N/R = Not Reported

Appendix D: Completed Protocol, AREE 66

AREE 66F

Associated AREEs:	N/A
Location:	Building 2025
Transformer ID:	6287290
Amount Spilled:	N/R
Spill Surface:	Ground
PCB Concentration:	1,115 ppm
Other Observations:	Pole was brought down during storm
Name:	Anthony Parkin
Date:	6/16/93

N/A = Not Applicable

N/R = Not Reported

Appendix E: Soil Sample Logs, AREE 66G

Arthur D Little**Soil Sample Log**Client **USAEC**Project **FT. DREW US II**Case No. **67065**Date **5/11/94**

Sampling Method

Surface Soil

Equipment Used

Stainless steel ~~to~~ spoon

Geologist(s)

H. Schaeffer, F. Ricciardi

Decontamination Procedure

Alconox + Water

Comments

Verteck Substation AREE 66

Location Diagram (Give distances to ensure reproducibility)

See work plan

Sample Number	Auger Hole ID	Total Organics (ppm)	GEOLOGIC DESCRIPTION
			Unified Soil Class ID, color (Munsell System), grain size, sorting, moisture, compaction, indication of contaminants (unusual odor or sheen), and general stratigraphic description
TRS-94-701	SX070100 1		Dark yellowish brown SILT (10YR 2/2) some fine-med sand trace gravel and
702	SX070200 2		SAME AS ABOVE
703	SX070300 3		
704	SX070400 4		
705	SX070500 5		
706	SX070600 6		
707	SX070700 7		2-3 SAME AS ABOVE 3-6 Greyish orange fine-med SAND
708	SX070800 8		Same as above
709	SX070900 9		
710	SX071000 10		Duplicate AS